CT&E Environmental Services Inc.
Anatech Division

1200 Conrad Industrial Drive
Ludington, MI 49431-2681
Tel: (616) 843-1877
Fax: (616) 845-9942

Thursday, November 12, 1998

John Young
NMED - HRMB
P.O. Box 26110
Santa Fe, NM 87502

Dear Mr. Young:

Enclosed is the analytical report for reference project. The radiological data from CORE contains QC summary information. A raw data QC package will be mailed when it is available from CORE labs.

Sincerely Yours;

Jason Asher
Project Manager

8169

100

CT&E Environmental Services Inc.

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CT&E Environmental Services, Inc.
Michigan Division
Laboratory Data Report

Project: NMED 9.98-WRC (HRMB)
Client: NMED-HRMB
Laboratory ID: 84464, 84492

Section 1: Case Narrative, CoC
Section 2: CT&E Michigan Laboratory Report
Section 3: CT&E Alaska Laboratory Report
Section 4: CORE Labs Report
Section 5: General Chemistry QC
Section 6: Metals QC
Section 7: VOC QC
Section 8: SVOC QC
Section 9: Radiological QC

Prepared By: (Signature) Jason A Asher
(Printed Name) Jason A. Asher
(Date) 11/12/98

CT&E Environmental Services Inc.

LABORATORY CASE NARRATIVE

NMED - HRMB

NMED - HRMB *Project Name:*	9.98-WRC Springs (HRMB)
NMED - HRMB *Project Number:*	9.98-WRC Springs (HRMB)
CT&E Project Number:	84464, 84492

Note: This Laboratory Case Narrative only pertains to the following indicated methods: SW-846 Method 8260B, 8270C, 6010B, 7470A, 7610, 9010A, SM 2320B, 2540C, EPA 350.1, 351.2, 365.1, 300.0, 160.2.

Sample Receipt:

Samples were collected by the client on 9/21/98 - 9/24/98. Samples were received at CT&E Laboratories on 9/24/98 and 9/28/98 without incident. Standard Chain of Custody procedures were followed. Samples were collected in preserved containers provided by CT&E Laboratories. Following log-in, the samples were stored at 4°C, where required, per SW-846 and EPA protocol until sample preparation or analysis. Analysis for radiological work were forwarded to CORE Labs for analysis. Samples for EPA method 300.0 anions were forwarded to CT&E Labs in Alaska.

Sample Preparation -

Inorganics:

Preparation/digestion of the sample(s), where applicable, was performed within holding time and with Chain of Custody maintained. Sample preparation proceeded without incident. A method blank, laboratory control sample, matrix spike, and matrix spike duplicate were processed with each QC set. The matrix spike and matrix spike duplicate were performed using sample location SP-Ancho-98 as requested on the chain of custody except were specifically noted (in some cases an alternate sample was spiked). Table 1 provides a cross reference for the client sample number and the metals preparation batch used.

Organics:

Preparation/extraction of the sample(s), where applicable, was performed within holding time and with Chain of Custody maintained. Sample preparation proceeded without incident. A method blank, laboratory control sample, matrix spike, and matrix spike duplicate were processed with each QC set. The matrix spike and matrix spike duplicate were performed using sample location SP-Ancho-98 as requested on the chain of custody. Table 1 provides a cross reference for the client sample number and the extraction batch used.

Sample Analysis -

Inorganics:

Sample analysis was performed without incident, within holding time, with chain of custody maintained, and according to the referenced methods except as noted below. Initial and continuing calibration criteria, as found in the referenced QA Protocol for the referenced methods, were adhered to for all samples included in this sample delivery group. Quality control results are summarized as follows:

1. Nitrite samples were analyzed past the 24 holding time required by method 300.0.
2. The TOC samples were left off the initial login and were not analyzed until 11/12/98 for project number 84492. The holding time for TOC is 28 days.
3. Al was detected in the method blank.

Organics:
Sample analysis was performed without incident, within holding time, with chain of custody maintained, and according to the referenced methods. Initial and continuing calibration criteria, as found in the referenced QA Protocol for the referenced methods, were adhered to for all samples included in this sample delivery group. Quality control results are summarized as follows:

1. Compounds not included in the normal calibration for 8260 and 8270 were reported as tentatively identified compounds (TIC) and flagged with a N on the report. A TIC is detected using the mass spectral library, if a tentative detection is made the compound is calibrated and a re-analysis is conducted. No TICs were detected.

Summary:

Inorganics:
No other significant problems were encountered during the analysis of the samples by the referenced methods except as noted above. All pertinent QA documentation was been provided.

Organics:
No other significant problems were encountered during the analysis of the samples by the referenced methods except as noted above. All pertinent QA documentation was been provided.

Reporting Party: Jason A Asher *Phone*: (616) 843-1877
Mr. Jason A. Asher, Project Manager

Table 1: Extraction / Digestion Batch Cross Reference

Client Sample ID	CT&E Sample ID	Mercury Prep Batch	ICP/Flame Prep Batch	Ag Prep Batch	8270 Extraction Batch
SP-3-98	84464-8677	558	M8594	M8955	8270-092W
SP-3A-98	84464-8678	558	M8594	M8955	8270-092W
SP-5-98	84464-8679	558	M8594	M8955	
SP-4-98	84464-8680	558	M8594	M8955	8270-092W
SP-4A-98	84464-8681	558	M8594	M8955	8270-092W
SP-5-98(A)	84464-8682	558	M8594	M8955	8270-092W
SP-10-98	84492-8739	559	M8594	M8955	8270-093W
SP-DOE-98	84492-8740	559	M8594	M8955	8270-093W
SP-9B-98	84492-8741	559	M8594	M8955	8270-093W
SP-6-98	84492-8742	559	M8594	M8955	8270-093W
SP-Ancho-98	84492-8743	559	M8594	M8955	8270-093W
Rinsate 9-98	84492-8476	559	M8594	M8955	8270-093W

Table 2: General Chemistry QC Batch Cross Reference

Client Sample ID	CT&E Sample ID	Alkalinity	Ammonia	TKN	Cyanide	TOC	TP
SP-3-98	84464-8677	9-28-98		Kj09298A	CN09298A	9-29-98	TP093098A
SP-3A-98	84464-8678	9-28-98		Kj10028A	CN09298A	9-29-98	TP093098A
SP-5-98	84464-8679	9-28-98		Kj09298A	CN09298A	9-29-98	TP093098A
SP-4-98	84464-8680	9-28-98		Kj09298A	CN09298A	9-29-98	TP093098A
SP-4A-98	84464-8681	9-28-98		Kj09298A	CN09298A	9-29-98	TP093098A
SP-5-98(A)	84464-8682	9-28-98		Kj09298A	CN09298A	9-29-98	TP093098A
SP-10-98	84492-8739	10-5-98	AM10018A	Kj10028A	CN10028A		TP093098A
SP-DOE-98	84492-8740	10-5-98	AM10018A	Kj10028A	CN10028A		TP093098A
SP-9B-98	84492-8741	10-5-98	AM10018A	Kj10028A	CN10028A		TP093098A
SP-6-98	84492-8742	10-5-98	AM10018A	Kj10028A	CN10028A		TP093098A
SP-Ancho-98	84492-8743	10-5-98	AM10018A	Kj10028A	CN10028A		TP093098A
Rinsate 9-98	84492-8476	10-5-98	AM10018A	Kj10028A	CN10028A		TP093098A

Table 3: Run Number Cross Reference

Client Sample ID	CT&E Sample ID	ICP	Hg	K	8270	8260
SP-3-98	84464-8677	0372 (Cd 0373)	743	741		
741	84464-8678	0372 (Pb 0373)	743	741		
SP-5-98	84464-8679	0372	743	741		
SP-4-98	84464-8680	0372	743	741		
SP-4A-98	84464-8681	0372	743	741		
SP-5-98(A)	84464-8682	0372 (Co 0373)	743	741		
SP-10-98	84492-8739	0372 (Be, Cd, Co, Ni, Pb, Sb 0373)	743	741		
SP-DOE-98	84492-8740	0372	743	741		
SP-9B-98	84492-8741	0372 (Pb 0373)	743	741		
SP-6-98	84492-8742	0372 (Pb 0373)	743	741		
SP-Ancho-98	84492-8743	0372 (Be, Cd, Mg 0373)	743	741		
Rinsate 9-98	84492-8476	0372	743	741		

CT&E Environmental Services Inc.

CHAIN OF CUSTODY

Chain of Custody

CT&E Environmental Services Inc.

Anatech Division, 1200 Conrad Industrial Dr., Ludington, MI 49431-2681

Lab ID# 81464

Page

Phone: 616-843-1877 FAX: 616-845-9942

Results To: John Young - NMED HRMB
2044M Galisteo
Santa Fe, NM 87505

Attention: John Young

Telephone # (505) 827-1558

FAX ? (Yes) No FAX # (505) 827-1544

Invoice To: NMED HRMB
Attn: Steven Vigil
Same address as above

Telephone # (505) 827-1558

Project Name: 9.98-WRC Springs (HRMB)

Project Number: 9.98-WRC Springs (HRMB)

State in which samples were collected: NM

REQUIRED COMPLETION DATE: 30 Days

Sampled by: JRY, MRD, KD

Work Authorization Signature: John R Young

This signature authorizes CT&E to perform the work requested on this form and acknowledges the terms and conditions of payment which are listed on the reverse side of this form.

Test Methods

Comment/Notes

Quote #

Level IV QC
metals: Al, Sb, As
Ba, Be, Cd, Ca, Cr
Co, Cu, Fe, Pb, Mg
Mn, Hg, Ni, K, Se
Ag, Na, Tl, V, Zn

Sample ID	Client Sample ID	Sampling Location	Date	Time am / pm	Comp Grab C/G	Sample Matrix	Drinking Water Y/N	Field Filtered Y/N	8260 B VOC	8270 APH SVOC	415.2 TOC	6010/7000/9010-23 TAL METALS W/o VANIOF (2 NONSAMPLES)	300 SERIES NITROGEN SPECIES (TKN TP AMMONIA)	310.1 ALKALINITY, 160.1 TDS 160.2 TSS 300.0 IONS	RAD: GFP GROSS ALPHA/BETA ALPHA SPEC U 234-235-238 PU 238, 239, 242 SR 89/90	VOC	Glass	O&G	250m PI	500m PI	1L PI	Other	pH Check
																	NP		H_2SO_4 NaOH		HNO3 NP		
8677	SP-3-98	WHITE ROCK CY	9/22/98	9:05AM	G	H_2O	N	N	1	1	1	2	1	1	1	4	1		2		2		✓
8678	SP-3A-98	WHITE ROCK CY	9/22/98	10:01AM	G	H_2O	N	N	1	1	1	2	1	1	1	4	1		2		2		✓
8679	SP-5-98	WHITE ROCK CY	9/22/98	11:05AM	G	H_2O	N	N	1	0	1	2	1	1	1	4			1		2		✓
8680	SP-4-98	WHITE ROCK CY	9/22/98	12:40P	G	H_2O	N	N	1	1	1	2	1	1	1	4	1		2		2		✓
8681	SP-4A-98	WHITE ROCK CY	9/22/98	1500P	G	H_2O	N	N	1	1	1	2	1	1	1	4	1		2		2		✓
8682	SP-5-98 (A)	WHITE ROCK CY	9/22/98	11:05AM	G	H_2O	N	N	1	1	1	2	1	1	1	4	1		2		2		✓
8683	T.B.															1							

Relinquished by	Date / Time (am / pm)	Relinquished by	Date / Time (am / pm)	Relinquished by	Date / Time (am / pm)
John R Young	9/23/98 12pm				
Received by	**Date / Time (am / pm)**	**Received by**	**Date / Time (am / pm)**	**Received by**	**Date / Time (am / pm)**
	9-24-98 11:30				

Cooler Temp #1 10°C Cooler Temp #2 8°C Cooler Temp #3 5°C Cooler Temp #4

Chain of Custody

Lab ID# 84492

CT&E Environmental Services Inc.

Anatech Division, 1200 Conrad Industrial Dr., Ludington, MI 49431-2681

Page

Phone: 616-843-1877 FAX: 616-845-9942

Results To: NMED-HRMB
2044A Galisteo
Santa Fe, NM 87505

Attention: John Young

Telephone # 505/827-1558

FAX? Yes No FAX # 505/827-1544

Invoice To: Steven Vigil
Same Address

Telephone # 505/827-1558

Project Name: 9.98-WRC(a) (HRMB)

Project Number: 9.98-WRC Springs

State in which samples were collected: NM

REQUIRED COMPLETION DATE: 30 days

Sampled by: JRY

Work Authorization Signature: John R. Young

This signature authorizes CT&E to perform the work requested on this form and acknowledges the terms and conditions of payment which are listed on the reverse side of this form.

Comment/Notes

Quote #

*1 TOC and VOA vial broke on the Rinsate Composite.

SP-5-98 Nitrogen Species was left behind last Shipment

* Please Return Blue Ice to NMED DOE-OB White Rock Office Attn: Michael Date

Sample ID	Client Sample ID	Sampling Location	Date	Time am / pm	Comp Grab C/G	Sample Matrix	Drinking Water Y/N	Field Filtered Y/N	8260B VOC (APP IX) 2 vials	8270 SVOC (APP IX) 2 vials	415.2 TOC 2 vials	6010/7000/9010-23-TAL Metals w/ Cyanide (1 liter + 250ml containers)	300 Series Nitrogen Species (TKN, Ammonia, pH)	310.1 Alkalinity, 160.1 TDS, 160.2 TSS, 300.0 Anions	Rad: GFP, Gross Alpha/Beta; Alpha Spec. U 234, 235, 238 Pu 238, 239, 242; GFP Sr-89/90	VOC	Glass	O&G	250ml PI	500ml PI	1L PI	Other	pH Check
8739	SP-10-98	White Rock Canyon	9/23/98	9:17 A	G	H_2O	N	N	1	1	1	1	1	1	1	4	2		2		2		
8740	SP-DOE-98	White Rock Canyon	9/23/98	12:10 P	G	"	N	N	1	1	1	1	1	1	1	4	2		2		2		
8741	SP-48-98	White Rock Canyon	9/23/98	2:30 P	G	"	N	N	1	1	1	1	1	1	1	4	2		2		2		
8742	SP-6-98	White Rock Canyon	9/24/98	11:00 A	G	"	N	N	1	1	1	1	1	1	1	4	2		2		2		
8743	SP-Ancho-98	White Rock Canyon	9/24/98	12:30 P	G	"	N	N	1	1	1	1	1	1	1	4	2		2		2		
8744	SP-Ancho(a) matrix spike	White Rock Canyon	9/24/98	12:30 P	G	"	N	N	1	1	1	1	1	1	1	4	2		2		2		
8745	SP-Ancho-98 matrix spike duplicate	White Rock Canyon	9/24/98	12:30 P	G	"	N	N	1	1	1	1	1	1	1	4	2		2		2		
~~8746~~	SP-5-98	White Rock Canyon	9/22/98	10:20 A	G	"	N	N	~~7/28/98~~	~~7/28/98~~	~~7/28/98~~	0	1	~~7/28/98~~	~~7/28/98~~				1				
8476	Rinsate 9-98	White Rock DOE-OB/Santa Fe HRMB	9/21/98	1900	C	"	N	N	1*	1*	1	1	1	1	1	~~4~~	1		2		~~2~~		
8477	T.B.		9-10													1							

Relinquished by	Date / Time (am / pm)	Relinquished by	Date / Time (am / pm)	Relinquished by	Date / Time (am / pm)
John R. Young	9/25/98 12 pm				
Received by	**Date / Time (am / pm)**	**Received by**	**Date / Time (am / pm)**	**Received by**	**Date / Time (am / pm)**
	9-28-98 11:00				

Cooler Temp #1	Cooler Temp #2	Cooler Temp #3	Cooler Temp #4
11	13	13	10

9-28-98

CT&E Environmental Services Inc.

CT&E LABORATORY REPORT

CT&E Environmental Services Inc.

Anatech Division
Analytical Report

Lab I.D. :	84464
Report Date :	11/11/1998
Project :	9.98-WRC Springs (HRMB)
Client :	NMED-HRMB
	20449 Galisteo
	Sante Fe, NM 87505
Attention :	Mr. John Young

47 pages including cover sheet

Anatech Division
1200 Conrad Ind. Dr.
Ludington, MI 49431

616-843-1877 - Phone
616-845-9942 - Fax

CT&E Environmental Services Inc.

 NMED-HRMB

Sample:	84464-8677	Matrix:	Water	/ Grab
Client Sample:	SP-3-98	Location:	Whiterock CY	
COLLECTED:	09/22/1998 09:05	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD	

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
TOTAL METALS ANALYSIS					
Aluminum (ICAP)	0.4 B	mg/L	0.1	SW-846 Mtd. 6010B	09/30/1998 JC
Antimony (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Arsenic (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Barium (ICAP)	0.046	mg/L	0.005	"	09/30/1998 JC
Beryllium (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Cadmium (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Calcium (ICAP)	21	mg/L	0.2	"	09/30/1998 JC
Chromium, Total (ICAP)	ND	mg/L	0.05	"	09/30/1998 JC
Cobalt (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Copper (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
Iron (ICAP)	0.1	mg/L	0.1	"	09/30/1998 JC
Lead (ICAP)	ND	mg/L	0.005	"	09/30/1998 JC
Magnesium (ICAP)	1.7	mg/L	0.03	"	09/30/1998 JC
Manganese (ICAP)	0.005	mg/L	0.003	"	09/30/1998 JC
Mercury (Cold Vapor)	ND	mg/L	0.0002	SW-846 Mtd. 7470A	10/01/1998 SMM
Nickel (ICAP)	ND	mg/L	0.005	SW-846 Mtd. 6010B	09/30/1998 JC
Potassium (Flame)	2.2	mg/L	0.5	SW-846 Mtd. 7610	09/30/1998 SMM
Selenium (ICAP)	ND	mg/L	0.02	SW-846 Mtd. 6010B	09/30/1998 JC
Silver (ICAP)	ND	mg/L	0.0005	"	09/30/1998 JC
Sodium (ICAP)	16	mg/L	0.5	"	09/30/1998 JC
Thallium (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
Vanadium (ICAP)	0.01	mg/L	0.01	"	09/30/1998 JC
Zinc (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
GENERAL CHEMISTRY					
Alkalinity, Bicarbonate	85	mg/L	10	Standard Mtd. 2320 B	09/28/1998 LS
Alkalinity, Carbonate	ND	mg/L	10	"	09/28/1998 LS
Alkalinity, Total	85	mg/L	10	"	09/28/1998 LS
Ammonia-Nitrogen	0.06	mg/L	0.06	EPA 350.1	09/28/1998 KA
Cyanide, Total	ND	mg/L	0.005	EPA 335.2	09/29/1998 LS
Kjeldahl-Nitrogen	ND	mg/L	0.1	EPA 351.2	09/29/1998 LS
Total Organic Carbon (TOC)	2	mg/L	1	EPA 415.1	09/29/1998 JL
Total Phosphorus	0.005	mg/L	0.004	EPA 365.1	09/30/1998 KA

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8677	Matrix:	Water	/ Grab
Client Sample:	SP-3-98	Location:	Whiterock CY	
COLLECTED:	09/22/1998 09:05	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD	

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
PHYSICAL PROPERTY ANALYSIS						
Solids, Dissolved	120		mg/L	10	Standard Method 2540C	09/29/1998 JC
Solids, Suspended	15		mg/L	1	EPA 160.2	09/28/1998 JL
INORGANIC PREPS						
Cold Vapor Preparation	-		-	-	SW-846 Mtd. 7470A	10/01/1998 SMM
ICP Digestion	-		-	-	SW-846 Mtd. 3010A	09/29/1998 BLM
ICP/GFAA Digestion (Antimony)	-		-	-	SW-846 Mtd. 3005A	09/29/1998 BLM
ICP/GFAA Digestion (Silver)	-		-	-	SW-846 Mtd. 7760A	09/29/1998 BLM
GC/MS VOLATILE ORGANIC						
Acetone	ND		ug/L	5	SW-846 Mtd. 8260B	10/01/1998 PJG
Acrolein	ND		ug/L	5	"	10/01/1998 PJG
Acrylonitrile	ND		ug/L	5	"	10/01/1998 PJG
Allyl Chloride	ND		ug/L	1	"	10/01/1998 PJG
Benzene	ND		ug/L	1	"	10/01/1998 PJG
Bromodichloromethane	ND		ug/L	1	"	10/01/1998 PJG
Bromoform	ND		ug/L	1	"	10/01/1998 PJG
Bromomethane	ND		ug/L	1	"	10/01/1998 PJG
Carbon Disulfide	ND		ug/L	1	"	10/01/1998 PJG
Carbon Tetrachloride	ND		ug/L	1	"	10/01/1998 PJG
Chlorobenzene	ND		ug/L	1	"	10/01/1998 PJG
Chloroethane	ND		ug/L	1	"	10/01/1998 PJG
Chloroform	ND		ug/L	1	"	10/01/1998 PJG
Chloromethane	ND		ug/L	1	"	10/01/1998 PJG
Chloroprene	ND	N	ug/L	5	"	10/01/1998 PJG
Dibromochloromethane	ND		ug/L	1	"	10/01/1998 PJG
1,2-Dibromo-3-Chloropropane	ND		ug/L	1	"	10/01/1998 PJG
1,2-Dibromoethane	ND		ug/L	1	"	10/01/1998 PJG
1,2-Dichlorobenzene	ND		ug/L	1	"	10/01/1998 PJG
1,3-Dichlorobenzene	ND		ug/L	1	"	10/01/1998 PJG
1,4-Dichlorobenzene	ND		ug/L	1	"	10/01/1998 PJG
t-1,4-Dichloro-2 butene	ND	N	ug/L	5	"	10/01/1998 PJG
Dichlorodifluoromethane	ND		ug/L	1	"	10/01/1998 PJG
1,1-Dichloroethane	ND		ug/L	1	"	10/01/1998 PJG
1,2-Dichloroethane	ND		ug/L	1	"	10/01/1998 PJG

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8677	Matrix:	Water / Grab
Client Sample:	SP-3-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 09:05	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC						
1,1-Dichloroethene	ND		ug/L	1	SW-846 Mtd. 8260B	10/01/1998 PJG
t-1,2-Dichloroethene	ND		ug/L	1	"	10/01/1998 PJG
1,2-Dichloropropane	ND		ug/L	1	"	10/01/1998 PJG
c-1,3-Dichloropropene	ND		ug/L	1	"	10/01/1998 PJG
t-1,3-Dichloropropene	ND		ug/L	1	"	10/01/1998 PJG
Ethylbenzene	ND		ug/L	1	"	10/01/1998 PJG
Ethyl Methacrylate	ND	N	ug/L	5	"	10/01/1998 PJG
2-Hexanone	ND		ug/L	5	"	10/01/1998 PJG
Methacrylonitrile	ND	N	ug/L	5	"	10/01/1998 PJG
Methylene Bromide	ND		ug/L	1	"	10/01/1998 PJG
Methylene Chloride	ND		ug/L	1	"	10/01/1998 PJG
Methyl Ethyl Ketone	ND		ug/L	5	"	10/01/1998 PJG
Methyl Iodide	ND		ug/L	1	"	10/01/1998 PJG
Methyl Methacrylate	ND	N	ug/L	5	"	10/01/1998 PJG
4-Methyl-2-pentanone (MIBK)	ND		ug/L	5	"	10/01/1998 PJG
Pentachloroethane	ND	N	ug/L	5	"	10/01/1998 PJG
2-Picoline	ND	N	ug/L	5	"	10/01/1998 PJG
Propionitrile	ND	N	ug/L	5	"	10/01/1998 PJG
Styrene	ND		ug/L	1	"	10/01/1998 PJG
1,1,1,2-Tetrachloroethane	ND		ug/L	1	"	10/01/1998 PJG
1,1,2,2-Tetrachloroethane	ND		ug/L	1	"	10/01/1998 PJG
Tetrachloroethene	ND		ug/L	1	"	10/01/1998 PJG
Toluene	ND		ug/L	1	"	10/01/1998 PJG
1,1,1-Trichloroethane	ND		ug/L	1	"	10/01/1998 PJG
1,1,2-Trichloroethane	ND		ug/L	1	"	10/01/1998 PJG
Trichloroethene	ND		ug/L	1	"	10/01/1998 PJG
Trichlorofluoromethane	ND		ug/L	1	"	10/01/1998 PJG
1,2,3-Trichloropropane	ND		ug/L	1	"	10/01/1998 PJG
Vinyl Acetate	ND		ug/L	5	"	10/01/1998 PJG
Vinyl Chloride	ND		ug/L	1	"	10/01/1998 PJG
Xylene (Total)	ND		ug/L	3	"	10/01/1998 PJG

Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Dibromofluoromethane	108	%	81-117	"	10/01/1998 PJG
Toluene-d8	102	%	87-114	"	10/01/1998 PJG

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8677	Matrix:	Water	/ Grab
Client Sample:	SP-3-98	Location:	Whiterock CY	
COLLECTED:	09/22/1998 09:05	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD	

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC						
Surrogate(s)	Result		Unit	Limits	Method	Date/Analyst
Bromofluorobenzene	99		%	84-108	SW-846 Mtd. 8260B	10/01/1998 PJG
GC/MS SEMIVOLATILE ORGANICS						
Acenaphthene	ND		ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
Acenaphthylene	ND		ug/L	5	"	10/01/1998 TMJ
Acetophenone	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Acetylaminofluorene	ND	N	ug/L	10	"	10/01/1998 TMJ
Aldrin	ND	N	ug/L	10	"	10/01/1998 TMJ
alpha-BHC	ND	N	ug/L	10	"	10/01/1998 TMJ
-Aminobiphenyl	ND	N	ug/L	10	"	10/01/1998 TMJ
Aniline	ND		ug/L	10	"	10/01/1998 TMJ
Anthracene	ND		ug/L	5	"	10/01/1998 TMJ
Aramite	ND	N	ug/L	10	"	10/01/1998 TMJ
Benzo(a)anthracene	ND		ug/L	5	"	10/01/1998 TMJ
Benzo(b)fluoranthene	ND		ug/L	5	"	10/01/1998 TMJ
Benzo(k)fluoranthene	ND		ug/L	5	"	10/01/1998 TMJ
Benzo(g,h,i)perylene	ND		ug/L	5	"	10/01/1998 TMJ
Benzo(a)pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Benzyl Alcohol	ND		ug/L	20	"	10/01/1998 TMJ
beta-BHC	ND	N	ug/L	40	"	10/01/1998 TMJ
Bis(2-chloroethoxy)methane	ND		ug/L	5	"	10/01/1998 TMJ
Bis(2-chloroethyl)ether	ND		ug/L	5	"	10/01/1998 TMJ
Bis(2chloro1methylethyl)ether	ND	N	ug/L	10	"	10/01/1998 TMJ
Bis(2-ethylhexyl)phthalate	ND		ug/L	5	"	10/01/1998 TMJ
4-Bromophenylphenyl ether	ND		ug/L	5	"	10/01/1998 TMJ
Butyl benzyl phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Chlordane	ND	N	ug/L	10	"	10/01/1998 TMJ
4-Chloroaniline	ND		ug/L	20	"	10/01/1998 TMJ
Chlorobenzilate	ND	N	ug/L	10	"	10/01/1998 TMJ
4-Chloro-3-methylphenol	ND		ug/L	5	"	10/01/1998 TMJ
2-Chloronaphthalene	ND		ug/L	5	"	10/01/1998 TMJ
2-Chlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
4-Chlorophenylphenyl ether	ND		ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8677	Matrix:	Water / Grab
Client Sample:	SP-3-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 09:05	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Chrysene	ND		ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
m&p-Cresol	ND		ug/L	10	"	10/01/1998 TMJ
o-Cresol	ND		ug/L	5	"	10/01/1998 TMJ
4,4'-DDD	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDE	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDT	ND	N	ug/L	10	"	10/01/1998 TMJ
delta-BHC	ND	N	ug/L	30	"	10/01/1998 TMJ
Diallate	ND	N	ug/L	10	"	10/01/1998 TMJ
Dibenzo(a,h)anthracene	ND		ug/L	5	"	10/01/1998 TMJ
Dibenzofuran	ND		ug/L	5	"	10/01/1998 TMJ
3,3-Dichlorobenzidine	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dichlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Dieldrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Diethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Dimethoate	ND	N	ug/L	10	"	10/01/1998 TMJ
p-(Dimethylamino)azobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
7,12-Dimethylbenz(a)anthracene	ND	N	ug/L	10	"	10/01/1998 TMJ
3,3-Dimethylbenzidine	ND	N	ug/L	10	"	10/01/1998 TMJ
a,a-Dimethylphenethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2,4-Dimethylphenol	ND		ug/L	5	"	10/01/1998 TMJ
Dimethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-Butyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-octyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
m-Dinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
4,6-Dinitro-o-cresol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrophenol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
Dinoseb	ND	N	ug/L	10	"	10/01/1998 TMJ
Diphenylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Disulfoton	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan I	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan II	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan sulfate	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8677	Matrix:	Water / Grab
Client Sample:	SP-3-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 09:05	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Endrin	ND	N	ug/L	10	SW-846 Mtd. 8270C	10/01/1998 TMJ
Endrin aldehyde	ND	N	ug/L	10	"	10/01/1998 TMJ
Ethyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
Famphur	ND	N	ug/L	10	"	10/01/1998 TMJ
Fluoranthene	ND		ug/L	5	"	10/01/1998 TMJ
Fluorene	ND		ug/L	5	"	10/01/1998 TMJ
gamma-BHC (Lindane)	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor Epoxide	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorobutadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorocyclopentadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachloroethane	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorophene	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachloropropene	ND	N	ug/L	10	"	10/01/1998 TMJ
Indeno(123-cd)pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Isodrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Isophorone	ND		ug/L	5	"	10/01/1998 TMJ
Isosafrole	ND	N	ug/L	10	"	10/01/1998 TMJ
Kepone	ND	N	ug/L	10	"	10/01/1998 TMJ
Methapyrilene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methoxychlor	ND	N	ug/L	10	"	10/01/1998 TMJ
3-Methylcholanthrene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Methylnaphthalene	ND		ug/L	5	"	10/01/1998 TMJ
Methyl Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Naphthalene	ND		ug/L	5	"	10/01/1998 TMJ
1,4-Naphthoquinone	ND	N	ug/L	10	"	10/01/1998 TMJ
1-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
3-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
4-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
Nitrobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2-Nitrophenol	ND		ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8677	Matrix:	Water	/ Grab
Client Sample:	SP-3-98	Location:	Whiterock CY	
COLLECTED:	09/22/1998 09:05	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD	

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
4-Nitrophenol	ND		ug/L	20	SW-846 Mtd. 8270C	10/01/1998 TMJ
4-Nitroquinoline 1-oxide	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-n-Butylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodiethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodimethylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosodiphenylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosomethylethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosomorpholine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosopiperidine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-propylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosopyrrolidine	ND	N	ug/L	10	"	10/01/1998 TMJ
-Nitro-o-toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachloronitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
Phenacetin	ND	N	ug/L	10	"	10/01/1998 TMJ
Phenanthrene	ND		ug/L	5	"	10/01/1998 TMJ
Phenol	ND		ug/L	5	"	10/01/1998 TMJ
p-Phenylenediamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Phorate	ND	N	ug/L	10	"	10/01/1998 TMJ
Pronamide	ND	N	ug/L	10	"	10/01/1998 TMJ
Pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Pyridine	ND		ug/L	10	"	10/01/1998 TMJ
Safrole	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4,5-Tetrachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
2,3,4,6-Tetrachlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Tetraethyl dithiopyrophosphate	ND	N	ug/L	10	"	10/01/1998 TMJ
Thionazin	ND	N	ug/L	10	"	10/01/1998 TMJ
o-Toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4-Trichlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2,4,5-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,4,6-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
O,O,O-TriethylPhosphorothioate	ND	N	ug/L	10	"	10/01/1998 TMJ
sym-Trinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8677	Matrix:	Water	/ Grab
Client Sample:	SP-3-98	Location:	Whiterock CY	
COLLECTED:	09/22/1998 09:05	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD	

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS					
Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Nitrobenzene-d5	35	%	13-101	SW-846 Mtd. 8270C	10/01/1998 TMJ
2-Fluorobiphenyl	43	%	1-141	"	10/01/1998 TMJ
p-Terphenyl-d14	87	%	7-160	"	10/01/1998 TMJ
Phenol-d5	20	%	9-138	"	10/01/1998 TMJ
2-Fluorophenol	24	%	1-131	"	10/01/1998 TMJ
2,4,6-Tribromophenol	69	%	15-141	"	10/01/1998 TMJ
ORGANIC PREPS					
Semi Volatile Extraction	-	-	-	SW-846 Mtd. 3510C	09/28/1998 FM

ND = Non Detectable

Project Manager

Jason A. Asher

Reported : 11/11/1998

Sample:	84464-8678	Matrix:	Water / Grab
Client Sample:	SP-3A-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 10:01	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
TOTAL METALS ANALYSIS					
Aluminum (ICAP)	0.2 B	mg/L	0.1	SW-846 Mtd. 6010B	09/30/1998 JC
Antimony (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Arsenic (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Barium (ICAP)	0.031	mg/L	0.005	"	09/30/1998 JC
Beryllium (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Cadmium (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Calcium (ICAP)	19	mg/L	0.2	"	09/30/1998 JC
Chromium, Total (ICAP)	ND	mg/L	0.05	"	09/30/1998 JC
Cobalt (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Copper (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
Iron (ICAP)	ND	mg/L	0.1	"	09/30/1998 JC
Lead (ICAP)	ND	mg/L	0.005	"	10/01/1998 JC
Magnesium (ICAP)	1.6	mg/L	0.03	"	09/30/1998 JC
Manganese (ICAP)	ND	mg/L	0.003	"	09/30/1998 JC
Mercury (Cold Vapor)	ND	mg/L	0.0002	SW-846 Mtd. 7470A	10/01/1998 SMM
Nickel (ICAP)	ND	mg/L	0.005	SW-846 Mtd. 6010B	09/30/1998 JC
Potassium (Flame)	2.5	mg/L	0.5	SW-846 Mtd. 7610	09/30/1998 SMM
Selenium (ICAP)	ND	mg/L	0.02	SW-846 Mtd. 6010B	09/30/1998 JC
Silver (ICAP)	ND	mg/L	0.0005	"	09/30/1998 JC
Sodium (ICAP)	15	mg/L	0.5	"	09/30/1998 JC
Thallium (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
Vanadium (ICAP)	0.01	mg/L	0.01	"	09/30/1998 JC
Zinc (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
GENERAL CHEMISTRY					
Alkalinity, Bicarbonate	81	mg/L	10	Standard Mtd. 2320 B	09/28/1998 LS
Alkalinity, Carbonate	ND	mg/L	10	"	09/28/1998 LS
Alkalinity, Total	81	mg/L	10	"	09/28/1998 LS
Ammonia-Nitrogen	ND	mg/L	0.06	EPA 350.1	09/28/1998 KA
Cyanide, Total	ND	mg/L	0.005	EPA 335.2	09/29/1998 LS
Kjeldahl-Nitrogen	ND	mg/L	0.1	EPA 351.2	09/29/1998 LS
Total Organic Carbon (TOC)	ND	mg/L	1	EPA 415.1	09/29/1998 JL
Total Phosphorus	ND	mg/L	0.004	EPA 365.1	09/30/1998 KA

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8678	Matrix:	Water	/ Grab
Client Sample:	SP-3A-98	Location:	Whiterock CY	
COLLECTED:	09/22/1998 10:01	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD	

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
PHYSICAL PROPERTY ANALYSIS						
Solids, Dissolved	90		mg/L	10	Standard Method 2540C	09/29/1998 JC
Solids, Suspended	ND		mg/L	1	EPA 160.2	09/28/1998 JL
INORGANIC PREPS						
Cold Vapor Preparation	-		-	-	SW-846 Mtd. 7470A	10/01/1998 SMM
ICP Digestion	-		-	-	SW-846 Mtd. 3010A	09/29/1998 BLM
ICP/GFAA Digestion (Antimony)	-		-	-	SW-846 Mtd. 3005A	09/29/1998 BLM
ICP/GFAA Digestion (Silver)	-		-	-	SW-846 Mtd. 7760A	09/29/1998 BLM
GC/MS VOLATILE ORGANIC						
Acetone	ND		ug/L	5	SW-846 Mtd. 8260B	10/01/1998 PJG
Acrolein	ND		ug/L	5	"	10/01/1998 PJG
Acrylonitrile	ND		ug/L	5	"	10/01/1998 PJG
Allyl Chloride	ND		ug/L	1	"	10/01/1998 PJG
Benzene	ND		ug/L	1	"	10/01/1998 PJG
Bromodichloromethane	ND		ug/L	1	"	10/01/1998 PJG
Bromoform	ND		ug/L	1	"	10/01/1998 PJG
Bromomethane	ND		ug/L	1	"	10/01/1998 PJG
Carbon Disulfide	ND		ug/L	1	"	10/01/1998 PJG
Carbon Tetrachloride	ND		ug/L	1	"	10/01/1998 PJG
Chlorobenzene	ND		ug/L	1	"	10/01/1998 PJG
Chloroethane	ND		ug/L	1	"	10/01/1998 PJG
Chloroform	ND		ug/L	1	"	10/01/1998 PJG
Chloromethane	ND		ug/L	1	"	10/01/1998 PJG
Chloroprene	ND	N	ug/L	5	"	10/01/1998 PJG
Dibromochloromethane	ND		ug/L	1	"	10/01/1998 PJG
1,2-Dibromo-3-Chloropropane	ND		ug/L	1	"	10/01/1998 PJG
1,2-Dibromoethane	ND		ug/L	1	"	10/01/1998 PJG
1,2-Dichlorobenzene	ND		ug/L	1	"	10/01/1998 PJG
1,3-Dichlorobenzene	ND		ug/L	1	"	10/01/1998 PJG
1,4-Dichlorobenzene	ND		ug/L	1	"	10/01/1998 PJG
t-1,4-Dichloro-2 butene	ND	N	ug/L	5	"	10/01/1998 PJG
Dichlorodifluoromethane	ND		ug/L	1	"	10/01/1998 PJG
1,1-Dichloroethane	ND		ug/L	1	"	10/01/1998 PJG
1,2-Dichloroethane	ND		ug/L	1	"	10/01/1998 PJG

ND = Non Detectable

Reported : 11/11/1998

CT&E Environmental Services Inc.

 NMED-HRMB

Sample:	84464-8678	Matrix:	Water / Grab
Client Sample:	SP-3A-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 10:01	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC						
1,1-Dichloroethene	ND		ug/L	1	SW-846 Mtd. 8260B	10/01/1998 PJG
t-1,2-Dichloroethene	ND		ug/L	1	"	10/01/1998 PJG
1,2-Dichloropropane	ND		ug/L	1	"	10/01/1998 PJG
c-1,3-Dichloropropene	ND		ug/L	1	"	10/01/1998 PJG
t-1,3-Dichloropropene	ND		ug/L	1	"	10/01/1998 PJG
Ethylbenzene	ND		ug/L	1	"	10/01/1998 PJG
Ethyl Methacrylate	ND	N	ug/L	5	"	10/01/1998 PJG
2-Hexanone	ND		ug/L	5	"	10/01/1998 PJG
Methacrylonitrile	ND	N	ug/L	5	"	10/01/1998 PJG
Methylene Bromide	ND		ug/L	1	"	10/01/1998 PJG
Methylene Chloride	ND		ug/L	1	"	10/01/1998 PJG
Methyl Ethyl Ketone	ND		ug/L	5	"	10/01/1998 PJG
Methyl Iodide	ND		ug/L	1	"	10/01/1998 PJG
Methyl Methacrylate	ND	N	ug/L	5	"	10/01/1998 PJG
4-Methyl-2-pentanone (MIBK)	ND		ug/L	5	"	10/01/1998 PJG
Pentachloroethane	ND	N	ug/L	5	"	10/01/1998 PJG
2-Picoline	ND	N	ug/L	5	"	10/01/1998 PJG
Propionitrile	ND	N	ug/L	5	"	10/01/1998 PJG
Styrene	ND		ug/L	1	"	10/01/1998 PJG
1,1,1,2-Tetrachloroethane	ND		ug/L	1	"	10/01/1998 PJG
1,1,2,2-Tetrachloroethane	ND		ug/L	1	"	10/01/1998 PJG
Tetrachloroethene	ND		ug/L	1	"	10/01/1998 PJG
Toluene	ND		ug/L	1	"	10/01/1998 PJG
1,1,1-Trichloroethane	ND		ug/L	1	"	10/01/1998 PJG
1,1,2-Trichloroethane	ND		ug/L	1	"	10/01/1998 PJG
Trichloroethene	ND		ug/L	1	"	10/01/1998 PJG
Trichlorofluoromethane	ND		ug/L	1	"	10/01/1998 PJG
1,2,3-Trichloropropane	ND		ug/L	1	"	10/01/1998 PJG
Vinyl Acetate	ND		ug/L	5	"	10/01/1998 PJG
Vinyl Chloride	ND		ug/L	1	"	10/01/1998 PJG
Xylene (Total)	ND		ug/L	3	"	10/01/1998 PJG

Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Dibromofluoromethane	105	%	81-117	"	10/01/1998 PJG
Toluene-d8	104	%	87-114	"	10/01/1998 PJG

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8678	Matrix:	Water / Grab
Client Sample:	SP-3A-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 10:01	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC					
Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Bromofluorobenzene	99	%	84-108	SW-846 Mtd. 8260B	10/01/1998 PJG
GC/MS SEMIVOLATILE ORGANICS					
Acenaphthene	ND	ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
Acenaphthylene	ND	ug/L	5	"	10/01/1998 TMJ
Acetophenone	ND N	ug/L	10	"	10/01/1998 TMJ
2-Acetylaminofluorene	ND N	ug/L	10	"	10/01/1998 TMJ
Aldrin	ND N	ug/L	10	"	10/01/1998 TMJ
alpha-BHC	ND N	ug/L	10	"	10/01/1998 TMJ
4-Aminobiphenyl	ND N	ug/L	10	"	10/01/1998 TMJ
Aniline	ND	ug/L	10	"	10/01/1998 TMJ
Anthracene	ND	ug/L	5	"	10/01/1998 TMJ
Aramite	ND N	ug/L	10	"	10/01/1998 TMJ
Benzo(a)anthracene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(b)fluoranthene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(k)fluoranthene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(g,h,i)perylene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(a)pyrene	ND	ug/L	5	"	10/01/1998 TMJ
Benzyl Alcohol	ND	ug/L	20	"	10/01/1998 TMJ
beta-BHC	ND N	ug/L	40	"	10/01/1998 TMJ
Bis(2-chloroethoxy)methane	ND	ug/L	5	"	10/01/1998 TMJ
Bis(2-chloroethyl)ether	ND	ug/L	5	"	10/01/1998 TMJ
Bis(2chloro1methylethyl)ether	ND N	ug/L	10	"	10/01/1998 TMJ
Bis(2-ethylhexyl)phthalate	ND	ug/L	5	"	10/01/1998 TMJ
4-Bromophenylphenyl ether	ND	ug/L	5	"	10/01/1998 TMJ
Butyl benzyl phthalate	ND	ug/L	5	"	10/01/1998 TMJ
Chlordane	ND N	ug/L	10	"	10/01/1998 TMJ
4-Chloroaniline	ND	ug/L	20	"	10/01/1998 TMJ
Chlorobenzilate	ND N	ug/L	10	"	10/01/1998 TMJ
4-Chloro-3-methylphenol	ND	ug/L	5	"	10/01/1998 TMJ
2-Chloronaphthalene	ND	ug/L	5	"	10/01/1998 TMJ
2-Chlorophenol	ND	ug/L	5	"	10/01/1998 TMJ
4-Chlorophenylphenyl ether	ND	ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8678	Matrix:	Water	/ Grab
Client Sample:	SP-3A-98	Location:	Whiterock CY	
COLLECTED:	09/22/1998 10:01	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD	

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Chrysene	ND		ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
m&p-Cresol	ND		ug/L	10	"	10/01/1998 TMJ
o-Cresol	ND		ug/L	5	"	10/01/1998 TMJ
4,4'-DDD	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDE	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDT	ND	N	ug/L	10	"	10/01/1998 TMJ
delta-BHC	ND	N	ug/L	30	"	10/01/1998 TMJ
Diallate	ND	N	ug/L	10	"	10/01/1998 TMJ
Dibenzo(a,h)anthracene	ND		ug/L	5	"	10/01/1998 TMJ
Dibenzofuran	ND		ug/L	5	"	10/01/1998 TMJ
3,3-Dichlorobenzidine	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dichlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Dieldrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Diethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Dimethoate	ND	N	ug/L	10	"	10/01/1998 TMJ
p-(Dimethylamino)azobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
7,12-Dimethylbenz(a)anthracene	ND	N	ug/L	10	"	10/01/1998 TMJ
3,3-Dimethylbenzidine	ND	N	ug/L	10	"	10/01/1998 TMJ
a,a-Dimethylphenethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2,4-Dimethylphenol	ND		ug/L	5	"	10/01/1998 TMJ
Dimethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-Butyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-octyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
m-Dinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
4,6-Dinitro-o-cresol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrophenol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
Dinoseb	ND	N	ug/L	10	"	10/01/1998 TMJ
Diphenylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Disulfoton	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan I	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan II	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan sulfate	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8678	Matrix:	Water / Grab
Client Sample:	SP-3A-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 10:01	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Endrin	ND	N	ug/L	10	SW-846 Mtd. 8270C	10/01/1998 TMJ
Endrin aldehyde	ND	N	ug/L	10	"	10/01/1998 TMJ
Ethyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
Famphur	ND	N	ug/L	10	"	10/01/1998 TMJ
Fluoranthene	ND		ug/L	5	"	10/01/1998 TMJ
Fluorene	ND		ug/L	5	"	10/01/1998 TMJ
gamma-BHC (Lindane)	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor Epoxide	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorobutadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorocyclopentadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachloroethane	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorophene	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachloropropene	ND	N	ug/L	10	"	10/01/1998 TMJ
Indeno(123-cd)pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Isodrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Isophorone	ND		ug/L	5	"	10/01/1998 TMJ
Isosafrole	ND	N	ug/L	10	"	10/01/1998 TMJ
Kepone	ND	N	ug/L	10	"	10/01/1998 TMJ
Methapyrilene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methoxychlor	ND	N	ug/L	10	"	10/01/1998 TMJ
3-Methylcholanthrene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Methylnaphthalene	ND		ug/L	5	"	10/01/1998 TMJ
Methyl Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Naphthalene	ND		ug/L	5	"	10/01/1998 TMJ
1,4-Naphthoquinone	ND	N	ug/L	10	"	10/01/1998 TMJ
1-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
3-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
4-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
Nitrobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2-Nitrophenol	ND		ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8678	Matrix:	Water / Grab
Client Sample:	SP-3A-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 10:01	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
4-Nitrophenol	ND		ug/L	20	SW-846 Mtd. 8270C	10/01/1998 TMJ
4-Nitroquinoline 1-oxide	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-n-Butylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodiethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodimethylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosodiphenylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosomethylethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosomorpholine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosopiperidine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-propylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosopyrrolidine	ND	N	ug/L	10	"	10/01/1998 TMJ
5-Nitro-o-toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachloronitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
Phenacetin	ND	N	ug/L	10	"	10/01/1998 TMJ
Phenanthrene	ND		ug/L	5	"	10/01/1998 TMJ
Phenol	ND		ug/L	5	"	10/01/1998 TMJ
p-Phenylenediamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Phorate	ND	N	ug/L	10	"	10/01/1998 TMJ
Pronamide	ND	N	ug/L	10	"	10/01/1998 TMJ
Pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Pyridine	ND		ug/L	10	"	10/01/1998 TMJ
Safrole	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4,5-Tetrachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
2,3,4,6-Tetrachlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Tetraethyl dithiopyrophosphate	ND	N	ug/L	10	"	10/01/1998 TMJ
Thionazin	ND	N	ug/L	10	"	10/01/1998 TMJ
o-Toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4-Trichlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2,4,5-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,4,6-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
O,O,O-TriethylPhosphorothioate	ND	N	ug/L	10	"	10/01/1998 TMJ
sym-Trinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8678	Matrix:	Water	/ Grab
Client Sample:	SP-3A-98	Location:	Whiterock CY	
COLLECTED:	09/22/1998 10:01	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD	

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS					
Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Nitrobenzene-d5	48	%	13-101	SW-846 Mtd. 8270C	10/01/1998 TMJ
2-Fluorobiphenyl	59	%	1-141	"	10/01/1998 TMJ
p-Terphenyl-d14	96	%	7-160	"	10/01/1998 TMJ
Phenol-d5	35	%	9-138	"	10/01/1998 TMJ
2-Fluorophenol	39	%	1-131	"	10/01/1998 TMJ
2,4,6-Tribromophenol	90	%	15-141	"	10/01/1998 TMJ
ORGANIC PREPS					
Semi Volatile Extraction	-	-	-	SW-846 Mtd. 3510C	09/28/1998 FM

ND = Non Detectable

Project Manager

Jason A. Asher

Reported : 11/11/1998

CT&E Environmental Services Inc.

NMED-HRMB

Sample:	84464-8679	Matrix:	Water	/ Grab
Client Sample:	SP-5-98	Location:	Whiterock CY	
COLLECTED:	09/22/1998 11:05	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD	

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
TOTAL METALS ANALYSIS						
Aluminum (ICAP)	0.2	B	mg/L	0.1	SW-846 Mtd. 6010B	09/30/1998 JC
Antimony (ICAP)	ND		mg/L	0.01	"	09/30/1998 JC
Arsenic (ICAP)	ND		mg/L	0.01	"	09/30/1998 JC
Barium (ICAP)	0.028		mg/L	0.005	"	09/30/1998 JC
Beryllium (ICAP)	ND		mg/L	0.001	"	09/30/1998 JC
Cadmium (ICAP)	ND		mg/L	0.001	"	09/30/1998 JC
Calcium (ICAP)	16		mg/L	0.2	"	09/30/1998 JC
Chromium, Total (ICAP)	ND		mg/L	0.05	"	09/30/1998 JC
Cobalt (ICAP)	ND		mg/L	0.001	"	09/30/1998 JC
Copper (ICAP)	ND		mg/L	0.02	"	09/30/1998 JC
Iron (ICAP)	ND		mg/L	0.1	"	09/30/1998 JC
Lead (ICAP)	ND		mg/L	0.005	"	09/30/1998 JC
Magnesium (ICAP)	4.2		mg/L	0.03	"	09/30/1998 JC
Manganese (ICAP)	ND		mg/L	0.003	"	09/30/1998 JC
Mercury (Cold Vapor)	ND		mg/L	0.0002	SW-846 Mtd. 7470A	10/01/1998 SMM
Nickel (ICAP)	ND		mg/L	0.005	SW-846 Mtd. 6010B	09/30/1998 JC
Potassium (Flame)	1.6		mg/L	0.5	SW-846 Mtd. 7610	09/30/1998 SMM
Selenium (ICAP)	ND		mg/L	0.02	SW-846 Mtd. 6010B	09/30/1998 JC
Silver (ICAP)	ND		mg/L	0.0005	"	09/30/1998 JC
Sodium (ICAP)	12		mg/L	0.5	"	09/30/1998 JC
Thallium (ICAP)	ND		mg/L	0.02	"	09/30/1998 JC
Vanadium (ICAP)	ND		mg/L	0.01	"	09/30/1998 JC
Zinc (ICAP)	ND		mg/L	0.02	"	09/30/1998 JC
GENERAL CHEMISTRY						
Alkalinity, Bicarbonate	79		mg/L	10	Standard Mtd. 2320 B	09/28/1998 LS
Alkalinity, Carbonate	ND		mg/L	10	"	09/28/1998 LS
Alkalinity, Total	79		mg/L	10	"	09/28/1998 LS
Ammonia-Nitrogen	ND		mg/L	0.06	EPA 350.1	10/01/1998 KA
Cyanide, Total	ND		mg/L	0.005	EPA 335.2	09/29/1998 LS
Kjeldahl-Nitrogen	0.3		mg/L	0.1	EPA 351.2	10/02/1998 LS
Total Organic Carbon (TOC)	1		mg/L	1	EPA 415.1	09/29/1998 JL
Total Phosphorus	0.010		mg/L	0.004	EPA 365.1	09/30/1998 KA

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8679	Matrix:	Water / Grab
Client Sample:	SP-5-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 11:05	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
PHYSICAL PROPERTY ANALYSIS						
Solids, Dissolved	140		mg/L	10	Standard Method 2540C	09/29/1998 JC
Solids, Suspended	ND		mg/L	1	EPA 160.2	09/28/1998 JL
INORGANIC PREPS						
Cold Vapor Preparation	-		-	-	SW-846 Mtd. 7470A	10/01/1998 SMM
ICP Digestion	-		-	-	SW-846 Mtd. 3010A	09/29/1998 BLM
ICP/GFAA Digestion (Antimony)	-		-	-	SW-846 Mtd. 3005A	09/29/1998 BLM
ICP/GFAA Digestion (Silver)	-		-	-	SW-846 Mtd. 7760A	09/29/1998 BLM
GC/MS VOLATILE ORGANIC						
Acetone	ND		ug/L	5	SW-846 Mtd. 8260B	10/01/1998 PJG
Acrolein	ND		ug/L	5	"	10/01/1998 PJG
Acrylonitrile	ND		ug/L	5	"	10/01/1998 PJG
Allyl Chloride	ND		ug/L	5	"	10/01/1998 PJG
Benzene	ND		ug/L	1	"	10/01/1998 PJG
Bromodichloromethane	ND		ug/L	1	"	10/01/1998 PJG
Bromoform	ND		ug/L	1	"	10/01/1998 PJG
Bromomethane	ND		ug/L	1	"	10/01/1998 PJG
Carbon Disulfide	ND		ug/L	1	"	10/01/1998 PJG
Carbon Tetrachloride	ND		ug/L	1	"	10/01/1998 PJG
Chlorobenzene	ND		ug/L	1	"	10/01/1998 PJG
Chloroethane	ND		ug/L	1	"	10/01/1998 PJG
Chloroform	ND		ug/L	1	"	10/01/1998 PJG
Chloromethane	ND		ug/L	1	"	10/01/1998 PJG
Chloroprene	ND	N	ug/L	5	"	10/01/1998 PJG
Dibromochloromethane	ND		ug/L	1	"	10/01/1998 PJG
1,2-Dibromo-3-Chloropropane	ND		ug/L	1	"	10/01/1998 PJG
1,2-Dibromoethane	ND		ug/L	1	"	10/01/1998 PJG
1,2-Dichlorobenzene	ND		ug/L	1	"	10/01/1998 PJG
1,3-Dichlorobenzene	ND		ug/L	1	"	10/01/1998 PJG
1,4-Dichlorobenzene	ND		ug/L	1	"	10/01/1998 PJG
t-1,4-Dichloro-2 butene	ND	N	ug/L	5	"	10/01/1998 PJG
Dichlorodifluoromethane	ND		ug/L	1	"	10/01/1998 PJG
1,1-Dichloroethane	ND		ug/L	1	"	10/01/1998 PJG
1,2-Dichloroethane	ND		ug/L	1	"	10/01/1998 PJG

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8679	Matrix:	Water	/ Grab
Client Sample:	SP-5-98	Location:	Whiterock CY	
COLLECTED:	09/22/1998 11:05	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD	

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC						
1,1-Dichloroethene	ND		ug/L	1	SW-846 Mtd. 8260B	10/01/1998 PJG
t-1,2-Dichloroethene	ND	N	ug/L	5	"	10/01/1998 PJG
1,2-Dichloropropane	ND		ug/L	1	"	10/01/1998 PJG
c-1,3-Dichloropropene	ND		ug/L	1	"	10/01/1998 PJG
t-1,3-Dichloropropene	ND		ug/L	1	"	10/01/1998 PJG
Ethylbenzene	ND		ug/L	1	"	10/01/1998 PJG
Ethyl Methacrylate	ND	N	ug/L	5	"	10/01/1998 PJG
2-Hexanone	ND		ug/L	5	"	10/01/1998 PJG
Methacrylonitrile	ND	N	ug/L	5	"	10/01/1998 PJG
Methylene Bromide	ND		ug/L	1	"	10/01/1998 PJG
Methylene Chloride	ND		ug/L	1	"	10/01/1998 PJG
Methyl Ethyl Ketone	ND		ug/L	5	"	10/01/1998 PJG
Methyl Iodide	ND		ug/L	1	"	10/01/1998 PJG
Methyl Methacrylate	ND	N	ug/L	5	"	10/01/1998 PJG
4-Methyl-2-pentanone (MIBK)	ND		ug/L	5	"	10/01/1998 PJG
Pentachloroethane	ND	N	ug/L	5	"	10/01/1998 PJG
2-Picoline	ND	N	ug/L	5	"	10/01/1998 PJG
Propionitrile	ND	N	ug/L	5	"	10/01/1998 PJG
Styrene	ND		ug/L	1	"	10/01/1998 PJG
1,1,1,2-Tetrachloroethane	ND		ug/L	1	"	10/01/1998 PJG
1,1,2,2-Tetrachloroethane	ND		ug/L	1	"	10/01/1998 PJG
Tetrachloroethene	ND		ug/L	1	"	10/01/1998 PJG
Toluene	ND		ug/L	1	"	10/01/1998 PJG
1,1,1-Trichloroethane	ND		ug/L	1	"	10/01/1998 PJG
1,1,2-Trichloroethane	ND		ug/L	1	"	10/01/1998 PJG
Trichloroethene	ND		ug/L	1	"	10/01/1998 PJG
Trichlorofluoromethane	ND		ug/L	1	"	10/01/1998 PJG
1,2,3-Trichloropropane	ND		ug/L	1	"	10/01/1998 PJG
Vinyl Acetate	ND		ug/L	5	"	10/01/1998 PJG
Vinyl Chloride	ND		ug/L	1	"	10/01/1998 PJG
Xylene (Total)	ND		ug/L	3	"	10/01/1998 PJG

Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Dibromofluoromethane	109	%	81-117	"	10/01/1998 PJG
Toluene-d8	102	%	87-114	"	10/01/1998 PJG

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8679	Matrix:	Water / Grab
Client Sample:	SP-5-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 11:05	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst

GC/MS VOLATILE ORGANIC

Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Bromofluorobenzene	99	%	84-108	SW-846 Mtd. 8260B	10/01/1998 PJG

ND = Non Detectable

Project Manager

Jason A. Asher

Reported : 11/11/1998

Sample:	84464-8680	Matrix:	Water / Grab
Client Sample:	SP-4-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 12:40	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
TOTAL METALS ANALYSIS						
Aluminum (ICAP)	0.2	B	mg/L	0.1	SW-846 Mtd. 6010B	09/30/1998 JC
Antimony (ICAP)	ND		mg/L	0.01	"	09/30/1998 JC
Arsenic (ICAP)	ND		mg/L	0.01	"	09/30/1998 JC
Barium (ICAP)	0.042		mg/L	0.005	"	09/30/1998 JC
Beryllium (ICAP)	ND		mg/L	0.001	"	09/30/1998 JC
Cadmium (ICAP)	ND		mg/L	0.001	"	09/30/1998 JC
Calcium (ICAP)	21		mg/L	0.2	"	09/30/1998 JC
Chromium, Total (ICAP)	ND		mg/L	0.05	"	09/30/1998 JC
Cobalt (ICAP)	ND		mg/L	0.001	"	09/30/1998 JC
Copper (ICAP)	ND		mg/L	0.02	"	09/30/1998 JC
Iron (ICAP)	ND		mg/L	0.1	"	09/30/1998 JC
Lead (ICAP)	0.008	B	mg/L	0.005	"	09/30/1998 JC
Magnesium (ICAP)	4.1		mg/L	0.03	"	09/30/1998 JC
Manganese (ICAP)	ND		mg/L	0.003	"	09/30/1998 JC
Mercury (Cold Vapor)	ND		mg/L	0.0002	SW-846 Mtd. 7470A	10/01/1998 SMM
Nickel (ICAP)	ND		mg/L	0.005	SW-846 Mtd. 6010B	09/30/1998 JC
Potassium (Flame)	2.1		mg/L	0.5	SW-846 Mtd. 7610	09/30/1998 SMM
Selenium (ICAP)	ND		mg/L	0.02	SW-846 Mtd. 6010B	09/30/1998 JC
Silver (ICAP)	ND		mg/L	0.0005	"	09/30/1998 JC
Sodium (ICAP)	14		mg/L	0.5	"	09/30/1998 JC
Thallium (ICAP)	ND		mg/L	0.02	"	09/30/1998 JC
Vanadium (ICAP)	ND		mg/L	0.01	"	09/30/1998 JC
Zinc (ICAP)	ND		mg/L	0.02	"	09/30/1998 JC
GENERAL CHEMISTRY						
Alkalinity, Bicarbonate	83		mg/L	10	Standard Mtd. 2320 B	09/28/1998 LS
Alkalinity, Carbonate	ND		mg/L	10	"	09/28/1998 LS
Alkalinity, Total	83		mg/L	10	"	09/28/1998 LS
Ammonia-Nitrogen	ND		mg/L	0.06	EPA 350.1	09/28/1998 KA
Cyanide, Total	ND		mg/L	0.005	EPA 335.2	09/29/1998 LS
Kjeldahl-Nitrogen	ND		mg/L	0.1	EPA 351.2	09/29/1998 LS
Total Organic Carbon (TOC)	ND		mg/L	1	EPA 415.1	09/29/1998 JL
Total Phosphorus	0.009		mg/L	0.004	EPA 365.1	09/30/1998 KA

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8680	Matrix:	Water / Grab
Client Sample:	SP-4-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 12:40	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
PHYSICAL PROPERTY ANALYSIS						
Solids, Dissolved	170		mg/L	10	Standard Method 2540C	09/29/1998 JC
Solids, Suspended	1		mg/L	1	EPA 160.2	09/28/1998 JL
INORGANIC PREPS						
Cold Vapor Preparation	-		-	-	SW-846 Mtd. 7470A	10/01/1998 SMM
ICP Digestion	-		-	-	SW-846 Mtd. 3010A	09/29/1998 BLM
ICP/GFAA Digestion (Antimony)	-		-	-	SW-846 Mtd. 3005A	09/29/1998 BLM
ICP/GFAA Digestion (Silver)	-		-	-	SW-846 Mtd. 7760A	09/29/1998 BLM
GC/MS VOLATILE ORGANIC						
Acetone	ND		ug/L	5	SW-846 Mtd. 8260B	10/02/1998 PJG
Acrolein	ND		ug/L	5	"	10/02/1998 PJG
Acrylonitrile	ND		ug/L	5	"	10/02/1998 PJG
Allyl Chloride	ND		ug/L	5	"	10/02/1998 PJG
Benzene	ND		ug/L	1	"	10/02/1998 PJG
Bromodichloromethane	ND		ug/L	1	"	10/02/1998 PJG
Bromoform	ND		ug/L	1	"	10/02/1998 PJG
Bromomethane	ND		ug/L	1	"	10/02/1998 PJG
Carbon Disulfide	ND		ug/L	1	"	10/02/1998 PJG
Carbon Tetrachloride	ND		ug/L	1	"	10/02/1998 PJG
Chlorobenzene	ND		ug/L	1	"	10/02/1998 PJG
Chloroethane	ND		ug/L	1	"	10/02/1998 PJG
Chloroform	ND		ug/L	1	"	10/02/1998 PJG
Chloromethane	ND		ug/L	1	"	10/02/1998 PJG
Chloroprene	ND	N	ug/L	5	"	10/02/1998 PJG
Dibromochloromethane	ND		ug/L	1	"	10/02/1998 PJG
1,2-Dibromo-3-Chloropropane	ND		ug/L	1	"	10/02/1998 PJG
1,2-Dibromoethane	ND		ug/L	1	"	10/02/1998 PJG
1,2-Dichlorobenzene	ND		ug/L	1	"	10/02/1998 PJG
1,3-Dichlorobenzene	ND		ug/L	1	"	10/02/1998 PJG
1,4-Dichlorobenzene	ND		ug/L	1	"	10/02/1998 PJG
t-1,4-Dichloro-2 butene	ND	N	ug/L	5	"	10/02/1998 PJG
Dichlorodifluoromethane	ND		ug/L	1	"	10/02/1998 PJG
1,1-Dichloroethane	ND		ug/L	1	"	10/02/1998 PJG
1,2-Dichloroethane	ND		ug/L	1	"	10/02/1998 PJG

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8680	Matrix:	Water / Grab
Client Sample:	SP-4-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 12:40	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC						
1,1-Dichloroethene	ND		ug/L	1	SW-846 Mtd. 8260B	10/02/1998 PJG
t-1,2-Dichloroethene	ND		ug/L	1	"	10/02/1998 PJG
1,2-Dichloropropane	ND		ug/L	1	"	10/02/1998 PJG
c-1,3-Dichloropropene	ND		ug/L	1	"	10/02/1998 PJG
t-1,3-Dichloropropene	ND		ug/L	1	"	10/02/1998 PJG
Ethylbenzene	ND		ug/L	1	"	10/02/1998 PJG
Ethyl Methacrylate	ND	N	ug/L	5	"	10/02/1998 PJG
2-Hexanone	ND		ug/L	5	"	10/02/1998 PJG
Methacrylonitrile	ND	N	ug/L	5	"	10/02/1998 PJG
Methylene Bromide	ND		ug/L	1	"	10/02/1998 PJG
Methylene Chloride	ND		ug/L	1	"	10/02/1998 PJG
Methyl Ethyl Ketone	ND		ug/L	5	"	10/02/1998 PJG
Methyl Iodide	ND		ug/L	1	"	10/02/1998 PJG
Methyl Methacrylate	ND	N	ug/L	5	"	10/02/1998 PJG
4-Methyl-2-pentanone (MIBK)	ND		ug/L	5	"	10/02/1998 PJG
Pentachloroethane	ND	N	ug/L	5	"	10/02/1998 PJG
2-Picoline	ND	N	ug/L	5	"	10/02/1998 PJG
Propionitrile	ND	N	ug/L	5	"	10/02/1998 PJG
Styrene	ND		ug/L	1	"	10/02/1998 PJG
1,1,1,2-Tetrachloroethane	ND		ug/L	1	"	10/02/1998 PJG
1,1,2,2-Tetrachloroethane	ND		ug/L	1	"	10/02/1998 PJG
Tetrachloroethene	ND		ug/L	1	"	10/02/1998 PJG
Toluene	ND		ug/L	1	"	10/02/1998 PJG
1,1,1-Trichloroethane	ND		ug/L	1	"	10/02/1998 PJG
1,1,2-Trichloroethane	ND		ug/L	1	"	10/02/1998 PJG
Trichloroethene	ND		ug/L	1	"	10/02/1998 PJG
Trichlorofluoromethane	ND		ug/L	1	"	10/02/1998 PJG
1,2,3-Trichloropropane	ND		ug/L	1	"	10/02/1998 PJG
Vinyl Acetate	ND		ug/L	5	"	10/02/1998 PJG
Vinyl Chloride	ND		ug/L	1	"	10/02/1998 PJG
Xylene (Total)	ND		ug/L	3	"	10/02/1998 PJG

Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Dibromofluoromethane	108	%	81-117	"	10/02/1998 PJG
Toluene-d8	102	%	87-114	"	10/02/1998 PJG

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8680	Matrix:	Water	/ Grab
Client Sample:	SP-4-98	Location:	Whiterock CY	
COLLECTED:	09/22/1998 12:40	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD	

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC					
Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Bromofluorobenzene	99	%	84-108	SW-846 Mtd. 8260B	10/02/1998 PJG
GC/MS SEMIVOLATILE ORGANICS					
Acenaphthene	ND	ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
Acenaphthylene	ND	ug/L	5	"	10/01/1998 TMJ
Acetophenone	ND N	ug/L	10	"	10/01/1998 TMJ
2-Acetylaminofluorene	ND N	ug/L	10	"	10/01/1998 TMJ
Aldrin	ND N	ug/L	10	"	10/01/1998 TMJ
alpha-BHC	ND N	ug/L	10	"	10/01/1998 TMJ
4-Aminobiphenyl	ND N	ug/L	10	"	10/01/1998 TMJ
Aniline	ND	ug/L	10	"	10/01/1998 TMJ
Anthracene	ND	ug/L	5	"	10/01/1998 TMJ
Aramite	ND N	ug/L	10	"	10/01/1998 TMJ
Benzo(a)anthracene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(b)fluoranthene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(k)fluoranthene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(g,h,i)perylene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(a)pyrene	ND	ug/L	5	"	10/01/1998 TMJ
Benzyl Alcohol	ND	ug/L	20	"	10/01/1998 TMJ
beta-BHC	ND N	ug/L	40	"	10/01/1998 TMJ
Bis(2-chloroethoxy)methane	ND	ug/L	5	"	10/01/1998 TMJ
Bis(2-chloroethyl)ether	ND	ug/L	5	"	10/01/1998 TMJ
Bis(2chloro1methylethyl)ether	ND N	ug/L	10	"	10/01/1998 TMJ
Bis(2-ethylhexyl)phthalate	ND	ug/L	5	"	10/01/1998 TMJ
4-Bromophenylphenyl ether	ND	ug/L	5	"	10/01/1998 TMJ
Butyl benzyl phthalate	ND	ug/L	5	"	10/01/1998 TMJ
Chlordane	ND N	ug/L	10	"	10/01/1998 TMJ
4-Chloroaniline	ND	ug/L	20	"	10/01/1998 TMJ
Chlorobenzilate	ND N	ug/L	10	"	10/01/1998 TMJ
4-Chloro-3-methylphenol	ND	ug/L	5	"	10/01/1998 TMJ
2-Chloronaphthalene	ND	ug/L	5	"	10/01/1998 TMJ
2-Chlorophenol	ND	ug/L	5	"	10/01/1998 TMJ
4-Chlorophenylphenyl ether	ND	ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8680	Matrix:	Water / Grab
Client Sample:	SP-4-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 12:40	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Chrysene	ND		ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
m&p-Cresol	ND		ug/L	10	"	10/01/1998 TMJ
o-Cresol	ND		ug/L	5	"	10/01/1998 TMJ
4,4'-DDD	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDE	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDT	ND	N	ug/L	10	"	10/01/1998 TMJ
delta-BHC	ND	N	ug/L	30	"	10/01/1998 TMJ
Diallate	ND	N	ug/L	10	"	10/01/1998 TMJ
Dibenzo(a,h)anthracene	ND		ug/L	5	"	10/01/1998 TMJ
Dibenzofuran	ND		ug/L	5	"	10/01/1998 TMJ
3,3-Dichlorobenzidine	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dichlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Dieldrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Diethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Dimethoate	ND	N	ug/L	10	"	10/01/1998 TMJ
p-(Dimethylamino)azobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
7,12-Dimethylbenz(a)anthracene	ND	N	ug/L	10	"	10/01/1998 TMJ
3,3-Dimethylbenzidine	ND	N	ug/L	10	"	10/01/1998 TMJ
a,a-Dimethylphenethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2,4-Dimethylphenol	ND		ug/L	5	"	10/01/1998 TMJ
Dimethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-Butyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-octyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
m-Dinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
4,6-Dinitro-o-cresol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrophenol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
Dinoseb	ND	N	ug/L	10	"	10/01/1998 TMJ
Diphenylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Disulfoton	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan I	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan II	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan sulfate	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8680	Matrix:	Water	/ Grab
Client Sample:	SP-4-98	Location:	Whiterock CY	
COLLECTED:	09/22/1998 12:40	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD	

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Endrin	ND	N	ug/L	10	SW-846 Mtd. 8270C	10/01/1998 TMJ
Endrin aldehyde	ND	N	ug/L	10	"	10/01/1998 TMJ
Ethyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
Famphur	ND	N	ug/L	10	"	10/01/1998 TMJ
Fluoranthene	ND		ug/L	5	"	10/01/1998 TMJ
Fluorene	ND		ug/L	5	"	10/01/1998 TMJ
gamma-BHC (Lindane)	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor Epoxide	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorobutadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorocyclopentadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachloroethane	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorophene	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachloropropene	ND	N	ug/L	10	"	10/01/1998 TMJ
Indeno(123-cd)pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Isodrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Isophorone	ND		ug/L	5	"	10/01/1998 TMJ
Isosafrole	ND	N	ug/L	10	"	10/01/1998 TMJ
Kepone	ND	N	ug/L	10	"	10/01/1998 TMJ
Methapyrilene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methoxychlor	ND	N	ug/L	10	"	10/01/1998 TMJ
3-Methylcholanthrene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Methylnaphthalene	ND		ug/L	5	"	10/01/1998 TMJ
Methyl Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Naphthalene	ND		ug/L	5	"	10/01/1998 TMJ
1,4-Naphthoquinone	ND	N	ug/L	10	"	10/01/1998 TMJ
1-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
3-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
4-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
Nitrobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2-Nitrophenol	ND		ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8680	Matrix:	Water / Grab
Client Sample:	SP-4-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 12:40	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
4-Nitrophenol	ND		ug/L	20	SW-846 Mtd. 8270C	10/01/1998 TMJ
4-Nitroquinoline 1-oxide	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-n-Butylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodiethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodimethylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosodiphenylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosomethylethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosomorpholine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosopiperidine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-propylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosopyrrolidine	ND	N	ug/L	10	"	10/01/1998 TMJ
5-Nitro-o-toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachloronitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
Phenacetin	ND	N	ug/L	10	"	10/01/1998 TMJ
Phenanthrene	ND		ug/L	5	"	10/01/1998 TMJ
Phenol	ND		ug/L	5	"	10/01/1998 TMJ
p-Phenylenediamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Phorate	ND	N	ug/L	10	"	10/01/1998 TMJ
Pronamide	ND	N	ug/L	10	"	10/01/1998 TMJ
Pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Pyridine	ND		ug/L	10	"	10/01/1998 TMJ
Safrole	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4,5-Tetrachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
2,3,4,6-Tetrachlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Tetraethyl dithiopyrophosphate	ND	N	ug/L	10	"	10/01/1998 TMJ
Thionazin	ND	N	ug/L	10	"	10/01/1998 TMJ
o-Toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4-Trichlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2,4,5-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,4,6-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
O,O,O-TriethylPhosphorothioate	ND	N	ug/L	10	"	10/01/1998 TMJ
sym-Trinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8680	Matrix:	Water / Grab
Client Sample:	SP-4-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 12:40	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS					
Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Nitrobenzene-d5	45	%	13-101	SW-846 Mtd. 8270C	10/01/1998 TMJ
2-Fluorobiphenyl	54	%	1-141	"	10/01/1998 TMJ
p-Terphenyl-d14	99	%	7-160	"	10/01/1998 TMJ
Phenol-d5	38	%	9-138	"	10/01/1998 TMJ
2-Fluorophenol	45	%	1-131	"	10/01/1998 TMJ
2,4,6-Tribromophenol	94	%	15-141	"	10/01/1998 TMJ
ORGANIC PREPS					
Semi Volatile Extraction	-	-	-	SW-846 Mtd. 3510C	09/28/1998 FM

ND = Non Detectable

Project Manager

Jason A. Asher

Reported : 11/11/1998

Sample:	84464-8681	Matrix:	Water / Grab
Client Sample:	SP-4A-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 15:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
TOTAL METALS ANALYSIS					
Aluminum (ICAP)	0.2	mg/L	0.1	SW-846 Mtd. 6010B	09/30/1998 JC
Antimony (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Arsenic (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Barium (ICAP)	0.044	mg/L	0.005	"	09/30/1998 JC
Beryllium (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Cadmium (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Calcium (ICAP)	20	mg/L	0.2	"	09/30/1998 JC
Chromium, Total (ICAP)	ND	mg/L	0.05	"	09/30/1998 JC
Cobalt (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Copper (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
Iron (ICAP)	ND	mg/L	0.1	"	09/30/1998 JC
Lead (ICAP)	ND	mg/L	0.005	"	09/30/1998 JC
Magnesium (ICAP)	4.4	mg/L	0.03	"	09/30/1998 JC
Manganese (ICAP)	ND	mg/L	0.003	"	09/30/1998 JC
Mercury (Cold Vapor)	ND	mg/L	0.0002	SW-846 Mtd. 7470A	10/01/1998 SMM
Nickel (ICAP)	ND	mg/L	0.005	SW-846 Mtd. 6010B	09/30/1998 JC
Potassium (Flame)	1.8	mg/L	0.5	SW-846 Mtd. 7610	09/30/1998 SMM
Selenium (ICAP)	ND	mg/L	0.02	SW-846 Mtd. 6010B	09/30/1998 JC
Silver (ICAP)	ND	mg/L	0.0005	"	09/30/1998 JC
Sodium (ICAP)	12	mg/L	0.5	"	09/30/1998 JC
Thallium (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
Vanadium (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Zinc (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
GENERAL CHEMISTRY					
Alkalinity, Bicarbonate	87	mg/L	10	Standard Mtd. 2320 B	09/28/1998 LS
Alkalinity, Carbonate	ND	mg/L	10	"	09/28/1998 LS
Alkalinity, Total	87	mg/L	10	"	09/28/1998 LS
Ammonia-Nitrogen	ND	mg/L	0.06	EPA 350.1	09/28/1998 KA
Cyanide, Total	ND	mg/L	0.005	EPA 335.2	09/29/1998 LS
Kjeldahl-Nitrogen	ND	mg/L	0.1	EPA 351.2	09/29/1998 LS
Total Organic Carbon (TOC)	1	mg/L	1	EPA 415.1	09/29/1998 JL
Total Phosphorus	0.009	mg/L	0.004	EPA 365.1	09/30/1998 KA

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8681	Matrix:	Water / Grab
Client Sample:	SP-4A-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 15:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
PHYSICAL PROPERTY ANALYSIS					
Solids, Dissolved	130	mg/L	10	Standard Method 2540C	09/29/1998 JC
Solids, Suspended	ND	mg/L	1	EPA 160.2	09/28/1998 JL
INORGANIC PREPS					
Cold Vapor Preparation	-	-	-	SW-846 Mtd. 7470A	10/01/1998 SMM
ICP Digestion	-	-	-	SW-846 Mtd. 3010A	09/29/1998 BLM
ICP/GFAA Digestion (Antimony)	-	-	-	SW-846 Mtd. 3005A	09/29/1998 BLM
ICP/GFAA Digestion (Silver)	-	-	-	SW-846 Mtd. 7760A	09/29/1998 BLM
GC/MS VOLATILE ORGANIC					
Acetone	ND	ug/L	5	SW-846 Mtd. 8260B	10/02/1998 PJG
Acrolein	ND	ug/L	5	"	10/02/1998 PJG
Acrylonitrile	ND	ug/L	5	"	10/02/1998 PJG
Allyl Chloride	ND	ug/L	5	"	10/02/1998 PJG
Benzene	ND	ug/L	1	"	10/02/1998 PJG
Bromodichloromethane	ND	ug/L	1	"	10/02/1998 PJG
Bromoform	ND	ug/L	1	"	10/02/1998 PJG
Bromomethane	ND	ug/L	1	"	10/02/1998 PJG
Carbon Disulfide	ND	ug/L	1	"	10/02/1998 PJG
Carbon Tetrachloride	ND	ug/L	1	"	10/02/1998 PJG
Chlorobenzene	ND	ug/L	1	"	10/02/1998 PJG
Chloroethane	ND	ug/L	1	"	10/02/1998 PJG
Chloroform	ND	ug/L	1	"	10/02/1998 PJG
Chloromethane	ND	ug/L	1	"	10/02/1998 PJG
Chloroprene	ND N	ug/L	5	"	10/02/1998 PJG
Dibromochloromethane	ND	ug/L	1	"	10/02/1998 PJG
1,2-Dibromo-3-Chloropropane	ND	ug/L	1	"	10/02/1998 PJG
1,2-Dibromoethane	ND	ug/L	1	"	10/02/1998 PJG
1,2-Dichlorobenzene	ND	ug/L	1	"	10/02/1998 PJG
1,3-Dichlorobenzene	ND	ug/L	1	"	10/02/1998 PJG
1,4-Dichlorobenzene	ND	ug/L	1	"	10/02/1998 PJG
t-1,4-Dichloro-2 butene	ND N	ug/L	5	"	10/02/1998 PJG
Dichlorodifluoromethane	ND	ug/L	1	"	10/02/1998 PJG
1,1-Dichloroethane	ND	ug/L	1	"	10/02/1998 PJG
1,2-Dichloroethane	ND	ug/L	1	"	10/02/1998 PJG

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8681	Matrix:	Water / Grab
Client Sample:	SP-4A-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 15:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC						
1,1-Dichloroethene	ND		ug/L	1	SW-846 Mtd. 8260B	10/02/1998 PJG
t-1,2-Dichloroethene	ND		ug/L	1	"	10/02/1998 PJG
1,2-Dichloropropane	ND		ug/L	1	"	10/02/1998 PJG
c-1,3-Dichloropropene	ND		ug/L	1	"	10/02/1998 PJG
t-1,3-Dichloropropene	ND		ug/L	1	"	10/02/1998 PJG
Ethylbenzene	ND		ug/L	1	"	10/02/1998 PJG
Ethyl Methacrylate	ND	N	ug/L	5	"	10/02/1998 PJG
2-Hexanone	ND		ug/L	5	"	10/02/1998 PJG
Methacrylonitrile	ND	N	ug/L	5	"	10/02/1998 PJG
Methylene Bromide	ND		ug/L	1	"	10/02/1998 PJG
Methylene Chloride	ND		ug/L	1	"	10/02/1998 PJG
Methyl Ethyl Ketone	ND		ug/L	5	"	10/02/1998 PJG
Methyl Iodide	ND		ug/L	1	"	10/02/1998 PJG
Methyl Methacrylate	ND	N	ug/L	5	"	10/02/1998 PJG
4-Methyl-2-pentanone (MIBK)	ND		ug/L	5	"	10/02/1998 PJG
Pentachloroethane	ND	N	ug/L	5	"	10/02/1998 PJG
2-Picoline	ND	N	ug/L	5	"	10/02/1998 PJG
Propionitrile	ND	N	ug/L	5	"	10/02/1998 PJG
Styrene	ND		ug/L	1	"	10/02/1998 PJG
1,1,1,2-Tetrachloroethane	ND		ug/L	1	"	10/02/1998 PJG
1,1,2,2-Tetrachloroethane	ND		ug/L	1	"	10/02/1998 PJG
Tetrachloroethene	ND		ug/L	1	"	10/02/1998 PJG
Toluene	ND		ug/L	1	"	10/02/1998 PJG
1,1,1-Trichloroethane	ND		ug/L	1	"	10/02/1998 PJG
1,1,2-Trichloroethane	ND		ug/L	1	"	10/02/1998 PJG
Trichloroethene	ND		ug/L	1	"	10/02/1998 PJG
Trichlorofluoromethane	ND		ug/L	1	"	10/02/1998 PJG
1,2,3-Trichloropropane	ND		ug/L	1	"	10/02/1998 PJG
Vinyl Acetate	ND		ug/L	5	"	10/02/1998 PJG
Vinyl Chloride	ND		ug/L	1	"	10/02/1998 PJG
Xylene (Total)	ND		ug/L	3	"	10/02/1998 PJG

Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Dibromofluoromethane	112	%	81-117	"	10/02/1998 PJG
Toluene-d8	104	%	87-114	"	10/02/1998 PJG

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8681	Matrix:	Water	/ Grab
Client Sample:	SP-4A-98	Location:	Whiterock CY	
COLLECTED:	09/22/1998 15:00	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD	

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC					
Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Bromofluorobenzene	101	%	84-108	SW-846 Mtd. 8260B	10/02/1998 PJG
GC/MS SEMIVOLATILE ORGANICS					
Acenaphthene	ND	ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
Acenaphthylene	ND	ug/L	5	"	10/01/1998 TMJ
Acetophenone	ND N	ug/L	10	"	10/01/1998 TMJ
2-Acetylaminofluorene	ND N	ug/L	10	"	10/01/1998 TMJ
Aldrin	ND N	ug/L	10	"	10/01/1998 TMJ
alpha-BHC	ND N	ug/L	10	"	10/01/1998 TMJ
4-Aminobiphenyl	ND N	ug/L	10	"	10/01/1998 TMJ
Aniline	ND	ug/L	10	"	10/01/1998 TMJ
Anthracene	ND	ug/L	5	"	10/01/1998 TMJ
Aramite	ND N	ug/L	10	"	10/01/1998 TMJ
Benzo(a)anthracene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(b)fluoranthene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(k)fluoranthene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(g,h,i)perylene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(a)pyrene	ND	ug/L	5	"	10/01/1998 TMJ
Benzyl Alcohol	ND	ug/L	20	"	10/01/1998 TMJ
beta-BHC	ND N	ug/L	40	"	10/01/1998 TMJ
Bis(2-chloroethoxy)methane	ND	ug/L	5	"	10/01/1998 TMJ
Bis(2-chloroethyl)ether	ND	ug/L	5	"	10/01/1998 TMJ
Bis(2chloro1methylethyl)ether	ND N	ug/L	10	"	10/01/1998 TMJ
Bis(2-ethylhexyl)phthalate	ND	ug/L	5	"	10/01/1998 TMJ
4-Bromophenylphenyl ether	ND	ug/L	5	"	10/01/1998 TMJ
Butyl benzyl phthalate	ND	ug/L	5	"	10/01/1998 TMJ
Chlordane	ND N	ug/L	10	"	10/01/1998 TMJ
4-Chloroaniline	ND	ug/L	20	"	10/01/1998 TMJ
Chlorobenzilate	ND N	ug/L	10	"	10/01/1998 TMJ
4-Chloro-3-methylphenol	ND	ug/L	5	"	10/01/1998 TMJ
2-Chloronaphthalene	ND	ug/L	5	"	10/01/1998 TMJ
2-Chlorophenol	ND	ug/L	5	"	10/01/1998 TMJ
4-Chlorophenylphenyl ether	ND	ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8681	Matrix:	Water	/ Grab
Client Sample:	SP-4A-98	Location:	Whiterock CY	
COLLECTED:	09/22/1998 15:00	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD	

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Chrysene	ND		ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
m&p-Cresol	ND		ug/L	10	"	10/01/1998 TMJ
o-Cresol	ND		ug/L	5	"	10/01/1998 TMJ
4,4'-DDD	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDE	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDT	ND	N	ug/L	10	"	10/01/1998 TMJ
delta-BHC	ND	N	ug/L	30	"	10/01/1998 TMJ
Diallate	ND	N	ug/L	10	"	10/01/1998 TMJ
Dibenzo(a,h)anthracene	ND		ug/L	5	"	10/01/1998 TMJ
Dibenzofuran	ND		ug/L	5	"	10/01/1998 TMJ
3,3-Dichlorobenzidine	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dichlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Dieldrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Diethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Dimethoate	ND	N	ug/L	10	"	10/01/1998 TMJ
p-(Dimethylamino)azobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
7,12-Dimethylbenz(a)anthracene	ND	N	ug/L	10	"	10/01/1998 TMJ
3,3-Dimethylbenzidine	ND	N	ug/L	10	"	10/01/1998 TMJ
a,a-Dimethylphenethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2,4-Dimethylphenol	ND		ug/L	5	"	10/01/1998 TMJ
Dimethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-Butyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-octyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
m-Dinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
4,6-Dinitro-o-cresol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrophenol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
Dinoseb	ND	N	ug/L	10	"	10/01/1998 TMJ
Diphenylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Disulfoton	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan I	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan II	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan sulfate	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8681	Matrix:	Water	/ Grab
Client Sample:	SP-4A-98	Location:	Whiterock CY	
COLLECTED:	09/22/1998 15:00	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD	

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst	
GC/MS SEMIVOLATILE ORGANICS							
Endrin	ND	N	ug/L	10	SW-846 Mtd. 8270C	10/01/1998	TMJ
Endrin aldehyde	ND	N	ug/L	10	"	10/01/1998	TMJ
Ethyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998	TMJ
Famphur	ND	N	ug/L	10	"	10/01/1998	TMJ
Fluoranthene	ND		ug/L	5	"	10/01/1998	TMJ
Fluorene	ND		ug/L	5	"	10/01/1998	TMJ
gamma-BHC (Lindane)	ND	N	ug/L	10	"	10/01/1998	TMJ
Heptachlor	ND	N	ug/L	10	"	10/01/1998	TMJ
Heptachlor Epoxide	ND	N	ug/L	10	"	10/01/1998	TMJ
Hexachlorobenzene	ND		ug/L	5	"	10/01/1998	TMJ
Hexachlorobutadiene	ND		ug/L	5	"	10/01/1998	TMJ
Hexachlorocyclopentadiene	ND		ug/L	5	"	10/01/1998	TMJ
Hexachloroethane	ND		ug/L	5	"	10/01/1998	TMJ
Hexachlorophene	ND	N	ug/L	10	"	10/01/1998	TMJ
Hexachloropropene	ND	N	ug/L	10	"	10/01/1998	TMJ
Indeno(123-cd)pyrene	ND		ug/L	5	"	10/01/1998	TMJ
Isodrin	ND	N	ug/L	10	"	10/01/1998	TMJ
Isophorone	ND		ug/L	5	"	10/01/1998	TMJ
Isosafrole	ND	N	ug/L	10	"	10/01/1998	TMJ
Kepone	ND	N	ug/L	10	"	10/01/1998	TMJ
Methapyrilene	ND	N	ug/L	10	"	10/01/1998	TMJ
Methoxychlor	ND	N	ug/L	10	"	10/01/1998	TMJ
3-Methylcholanthrene	ND	N	ug/L	10	"	10/01/1998	TMJ
Methyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998	TMJ
2-Methylnaphthalene	ND		ug/L	5	"	10/01/1998	TMJ
Methyl Parathion	ND	N	ug/L	10	"	10/01/1998	TMJ
Naphthalene	ND		ug/L	5	"	10/01/1998	TMJ
1,4-Naphthoquinone	ND	N	ug/L	10	"	10/01/1998	TMJ
1-Naphthylamine	ND	N	ug/L	10	"	10/01/1998	TMJ
2-Naphthylamine	ND	N	ug/L	10	"	10/01/1998	TMJ
2-Nitroaniline	ND		ug/L	20	"	10/01/1998	TMJ
3-Nitroaniline	ND		ug/L	20	"	10/01/1998	TMJ
4-Nitroaniline	ND		ug/L	20	"	10/01/1998	TMJ
Nitrobenzene	ND		ug/L	5	"	10/01/1998	TMJ
2-Nitrophenol	ND		ug/L	5	"	10/01/1998	TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8681	Matrix:	Water / Grab
Client Sample:	SP-4A-98	Location:	Whiterock CY
COLLECTED:	09/22/1998 15:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
4-Nitrophenol	ND		ug/L	20	SW-846 Mtd. 8270C	10/01/1998 TMJ
4-Nitroquinoline 1-oxide	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-n-Butylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodiethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodimethylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosodiphenylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosomethylethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosomorpholine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosopiperidine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-propylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosopyrrolidine	ND	N	ug/L	10	"	10/01/1998 TMJ
5-Nitro-o-toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachloronitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
Phenacetin	ND	N	ug/L	10	"	10/01/1998 TMJ
Phenanthrene	ND		ug/L	5	"	10/01/1998 TMJ
Phenol	ND		ug/L	5	"	10/01/1998 TMJ
p-Phenylenediamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Phorate	ND	N	ug/L	10	"	10/01/1998 TMJ
Pronamide	ND	N	ug/L	10	"	10/01/1998 TMJ
Pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Pyridine	ND		ug/L	10	"	10/01/1998 TMJ
Safrole	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4,5-Tetrachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
2,3,4,6-Tetrachlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Tetraethyl dithiopyrophosphate	ND	N	ug/L	10	"	10/01/1998 TMJ
Thionazin	ND	N	ug/L	10	"	10/01/1998 TMJ
o-Toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4-Trichlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2,4,5-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,4,6-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
O,O,O-TriethylPhosphorothioate	ND	N	ug/L	10	"	10/01/1998 TMJ
sym-Trinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8681	Matrix:	Water	/ Grab
Client Sample:	SP-4A-98	Location:	Whiterock CY	
COLLECTED:	09/22/1998 15:00	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD	

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS					
Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Nitrobenzene-d5	34	%	13-101	SW-846 Mtd. 8270C	10/01/1998 TMJ
2-Fluorobiphenyl	40	%	1-141	"	10/01/1998 TMJ
p-Terphenyl-d14	81	%	7-160	"	10/01/1998 TMJ
Phenol-d5	29	%	9-138	"	10/01/1998 TMJ
2-Fluorophenol	34	%	1-131	"	10/01/1998 TMJ
2,4,6-Tribromophenol	78	%	15-141	"	10/01/1998 TMJ
ORGANIC PREPS					
Semi Volatile Extraction	-	-	-	SW-846 Mtd. 3510C	09/28/1998 FM

ND = Non Detectable

Project Manager

Jason A. Asher

Reported : 11/11/1998

Sample:	84464-8682	Matrix:	Water / Grab
Client Sample:	SP-5-98 A	Location:	Whiterock CY
COLLECTED:	09/22/1998 11:05	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
TOTAL METALS ANALYSIS					
Aluminum (ICAP)	0.2 B	mg/L	0.1	SW-846 Mtd. 6010B	09/30/1998 JC
Antimony (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Arsenic (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Barium (ICAP)	0.029	mg/L	0.005	"	09/30/1998 JC
Beryllium (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Cadmium (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Calcium (ICAP)	17	mg/L	0.2	"	09/30/1998 JC
Chromium, Total (ICAP)	ND	mg/L	0.05	"	09/30/1998 JC
Cobalt (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Copper (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
Iron (ICAP)	ND	mg/L	0.1	"	09/30/1998 JC
Lead (ICAP)	ND	mg/L	0.005	"	09/30/1998 JC
Magnesium (ICAP)	4.3	mg/L	0.03	"	09/30/1998 JC
Manganese (ICAP)	ND	mg/L	0.003	"	09/30/1998 JC
Mercury (Cold Vapor)	ND	mg/L	0.0002	SW-846 Mtd. 7470A	10/01/1998 SMM
Nickel (ICAP)	ND	mg/L	0.005	SW-846 Mtd. 6010B	09/30/1998 JC
Potassium (Flame)	1.5	mg/L	0.5	SW-846 Mtd. 7610	09/30/1998 SMM
Selenium (ICAP)	ND	mg/L	0.02	SW-846 Mtd. 6010B	09/30/1998 JC
Silver (ICAP)	ND	mg/L	0.0005	"	09/30/1998 JC
Sodium (ICAP)	12	mg/L	0.5	"	09/30/1998 JC
Thallium (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
Vanadium (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Zinc (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
GENERAL CHEMISTRY					
Alkalinity, Bicarbonate	79	mg/L	10	Standard Mtd. 2320 B	09/28/1998 LS
Alkalinity, Carbonate	ND	mg/L	10	"	09/28/1998 LS
Alkalinity, Total	79	mg/L	10	"	09/28/1998 LS
Ammonia-Nitrogen	ND	mg/L	0.06	EPA 350.1	09/28/1998 KA
Cyanide, Total	ND	mg/L	0.005	EPA 335.2	09/29/1998 LS
Kjeldahl-Nitrogen	ND	mg/L	0.1	EPA 351.2	09/29/1998 LS
Total Organic Carbon (TOC)	ND	mg/L	1	EPA 415.1	09/29/1998 JL
Total Phosphorus	0.011	mg/L	0.004	EPA 365.1	09/30/1998 KA

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8682	Matrix:	Water / Grab
Client Sample:	SP-5-98 A	Location:	Whiterock CY
COLLECTED:	09/22/1998 11:05	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
PHYSICAL PROPERTY ANALYSIS						
Solids, Dissolved	180		mg/L	10	Standard Method 2540C	09/29/1998 JC
Solids, Suspended	ND		mg/L	1	EPA 160.2	09/28/1998 JL
INORGANIC PREPS						
Cold Vapor Preparation	-		-	-	SW-846 Mtd. 7470A	10/01/1998 SMM
ICP Digestion	-		-	-	SW-846 Mtd. 3010A	09/29/1998 BLM
ICP/GFAA Digestion (Antimony)	-		-	-	SW-846 Mtd. 3005A	09/29/1998 BLM
ICP/GFAA Digestion (Silver)	-		-	-	SW-846 Mtd. 7760A	09/29/1998 BLM
GC/MS VOLATILE ORGANIC						
Acetone	ND		ug/L	5	SW-846 Mtd. 8260B	10/02/1998 PJG
Acrolein	ND		ug/L	5	"	10/02/1998 PJG
Acrylonitrile	ND		ug/L	5	"	10/02/1998 PJG
Allyl Chloride	ND		ug/L	5	"	10/02/1998 PJG
Benzene	ND		ug/L	1	"	10/02/1998 PJG
Bromodichloromethane	ND		ug/L	1	"	10/02/1998 PJG
Bromoform	ND		ug/L	1	"	10/02/1998 PJG
Bromomethane	ND		ug/L	1	"	10/02/1998 PJG
Carbon Disulfide	ND		ug/L	1	"	10/02/1998 PJG
Carbon Tetrachloride	ND		ug/L	1	"	10/02/1998 PJG
Chlorobenzene	ND		ug/L	1	"	10/02/1998 PJG
Chloroethane	ND		ug/L	1	"	10/02/1998 PJG
Chloroform	ND		ug/L	1	"	10/02/1998 PJG
Chloromethane	ND		ug/L	1	"	10/02/1998 PJG
Chloroprene	ND	N	ug/L	5	"	10/02/1998 PJG
Dibromochloromethane	ND		ug/L	1	"	10/02/1998 PJG
1,2-Dibromo-3-Chloropropane	ND		ug/L	1	"	10/02/1998 PJG
1,2-Dibromoethane	ND		ug/L	1	"	10/02/1998 PJG
1,2-Dichlorobenzene	ND		ug/L	1	"	10/02/1998 PJG
1,3-Dichlorobenzene	ND		ug/L	1	"	10/02/1998 PJG
1,4-Dichlorobenzene	ND		ug/L	1	"	10/02/1998 PJG
t-1,4-Dichloro-2 butene	ND	N	ug/L	5	"	10/02/1998 PJG
Dichlorodifluoromethane	ND		ug/L	1	"	10/02/1998 PJG
1,1-Dichloroethane	ND		ug/L	1	"	10/02/1998 PJG
1,2-Dichloroethane	ND		ug/L	1	"	10/02/1998 PJG

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8682	Matrix:	Water / Grab
Client Sample:	SP-5-98 A	Location:	Whiterock CY
COLLECTED:	09/22/1998 11:05	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC						
1,1-Dichloroethene	ND		ug/L	1	SW-846 Mtd. 8260B	10/02/1998 PJG
t-1,2-Dichloroethene	ND		ug/L	1	"	10/02/1998 PJG
1,2-Dichloropropane	ND		ug/L	1	"	10/02/1998 PJG
c-1,3-Dichloropropene	ND		ug/L	1	"	10/02/1998 PJG
t-1,3-Dichloropropene	ND		ug/L	1	"	10/02/1998 PJG
Ethylbenzene	ND		ug/L	1	"	10/02/1998 PJG
Ethyl Methacrylate	ND	N	ug/L	5	"	10/02/1998 PJG
2-Hexanone	ND		ug/L	5	"	10/02/1998 PJG
Methacrylonitrile	ND	N	ug/L	5	"	10/02/1998 PJG
Methylene Bromide	ND		ug/L	1	"	10/02/1998 PJG
Methylene Chloride	ND		ug/L	1	"	10/02/1998 PJG
Methyl Ethyl Ketone	ND		ug/L	5	"	10/02/1998 PJG
Methyl Iodide	ND		ug/L	1	"	10/02/1998 PJG
Methyl Methacrylate	ND	N	ug/L	5	"	10/02/1998 PJG
4-Methyl-2-pentanone (MIBK)	ND		ug/L	5	"	10/02/1998 PJG
Pentachloroethane	ND	N	ug/L	5	"	10/02/1998 PJG
2-Picoline	ND	N	ug/L	5	"	10/02/1998 PJG
Propionitrile	ND	N	ug/L	5	"	10/02/1998 PJG
Styrene	ND		ug/L	1	"	10/02/1998 PJG
1,1,1,2-Tetrachloroethane	ND		ug/L	1	"	10/02/1998 PJG
1,1,2,2-Tetrachloroethane	ND		ug/L	1	"	10/02/1998 PJG
Tetrachloroethene	ND		ug/L	1	"	10/02/1998 PJG
Toluene	ND		ug/L	1	"	10/02/1998 PJG
1,1,1-Trichloroethane	ND		ug/L	1	"	10/02/1998 PJG
1,1,2-Trichloroethane	ND		ug/L	1	"	10/02/1998 PJG
Trichloroethene	ND		ug/L	1	"	10/02/1998 PJG
Trichlorofluoromethane	ND		ug/L	1	"	10/02/1998 PJG
1,2,3-Trichloropropane	ND		ug/L	1	"	10/02/1998 PJG
Vinyl Acetate	ND		ug/L	5	"	10/02/1998 PJG
Vinyl Chloride	ND		ug/L	1	"	10/02/1998 PJG
Xylene (Total)	ND		ug/L	3	"	10/02/1998 PJG

Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Dibromofluoromethane	111	%	81-117	"	10/02/1998 PJG
Toluene-d8	104	%	87-114	"	10/02/1998 PJG

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8682	Matrix:	Water / Grab
Client Sample:	SP-5-98 A	Location:	Whiterock CY
COLLECTED:	09/22/1998 11:05	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst

GC/MS VOLATILE ORGANIC

Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Bromofluorobenzene	101	%	84-108	SW-846 Mtd. 8260B	10/02/1998 PJG

GC/MS SEMIVOLATILE ORGANICS

Acenaphthene	ND		ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
Acenaphthylene	ND		ug/L	5	"	10/01/1998 TMJ
Acetophenone	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Acetylaminofluorene	ND	N	ug/L	10	"	10/01/1998 TMJ
Aldrin	ND	N	ug/L	10	"	10/01/1998 TMJ
alpha-BHC	ND	N	ug/L	10	"	10/01/1998 TMJ
1-Aminobiphenyl	ND	N	ug/L	10	"	10/01/1998 TMJ
Aniline	ND		ug/L	10	"	10/01/1998 TMJ
Anthracene	ND		ug/L	5	"	10/01/1998 TMJ
Aramite	ND	N	ug/L	10	"	10/01/1998 TMJ
Benzo(a)anthracene	ND		ug/L	5	"	10/01/1998 TMJ
Benzo(b)fluoranthene	ND		ug/L	5	"	10/01/1998 TMJ
Benzo(k)fluoranthene	ND		ug/L	5	"	10/01/1998 TMJ
Benzo(g,h,i)perylene	ND		ug/L	5	"	10/01/1998 TMJ
Benzo(a)pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Benzyl Alcohol	ND		ug/L	20	"	10/01/1998 TMJ
beta-BHC	ND	N	ug/L	40	"	10/01/1998 TMJ
Bis(2-chloroethoxy)methane	ND		ug/L	5	"	10/01/1998 TMJ
Bis(2-chloroethyl)ether	ND		ug/L	5	"	10/01/1998 TMJ
Bis(2chloro1methylethyl)ether	ND	N	ug/L	10	"	10/01/1998 TMJ
Bis(2-ethylhexyl)phthalate	ND		ug/L	5	"	10/01/1998 TMJ
4-Bromophenylphenyl ether	ND		ug/L	5	"	10/01/1998 TMJ
Butyl benzyl phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Chlordane	ND	N	ug/L	10	"	10/01/1998 TMJ
4-Chloroaniline	ND		ug/L	20	"	10/01/1998 TMJ
Chlorobenzilate	ND	N	ug/L	10	"	10/01/1998 TMJ
4-Chloro-3-methylphenol	ND		ug/L	5	"	10/01/1998 TMJ
2-Chloronaphthalene	ND		ug/L	5	"	10/01/1998 TMJ
2-Chlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
4-Chlorophenylphenyl ether	ND		ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8682	Matrix:	Water / Grab
Client Sample:	SP-5-98 A	Location:	Whiterock CY
COLLECTED:	09/22/1998 11:05	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Chrysene	ND		ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
m&p-Cresol	ND		ug/L	10	"	10/01/1998 TMJ
o-Cresol	ND		ug/L	5	"	10/01/1998 TMJ
4,4'-DDD	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDE	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDT	ND	N	ug/L	10	"	10/01/1998 TMJ
delta-BHC	ND	N	ug/L	30	"	10/01/1998 TMJ
Diallate	ND	N	ug/L	10	"	10/01/1998 TMJ
Dibenzo(a,h)anthracene	ND		ug/L	5	"	10/01/1998 TMJ
Dibenzofuran	ND		ug/L	5	"	10/01/1998 TMJ
3,3-Dichlorobenzidine	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dichlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Dieldrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Diethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Dimethoate	ND	N	ug/L	10	"	10/01/1998 TMJ
p-(Dimethylamino)azobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
7,12-Dimethylbenz(a)anthracene	ND	N	ug/L	10	"	10/01/1998 TMJ
3,3-Dimethylbenzidine	ND	N	ug/L	10	"	10/01/1998 TMJ
a,a-Dimethylphenethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2,4-Dimethylphenol	ND		ug/L	5	"	10/01/1998 TMJ
Dimethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-Butyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-octyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
m-Dinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
4,6-Dinitro-o-cresol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrophenol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
Dinoseb	ND	N	ug/L	10	"	10/01/1998 TMJ
Diphenylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Disulfoton	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan I	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan II	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan sulfate	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8682	Matrix:	Water / Grab
Client Sample:	SP-5-98 A	Location:	Whiterock CY
COLLECTED:	09/22/1998 11:05	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Endrin	ND	N	ug/L	10	SW-846 Mtd. 8270C	10/01/1998 TMJ
Endrin aldehyde	ND	N	ug/L	10	"	10/01/1998 TMJ
Ethyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
Famphur	ND	N	ug/L	10	"	10/01/1998 TMJ
Fluoranthene	ND		ug/L	5	"	10/01/1998 TMJ
Fluorene	ND		ug/L	5	"	10/01/1998 TMJ
gamma-BHC (Lindane)	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor Epoxide	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorobutadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorocyclopentadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachloroethane	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorophene	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachloropropene	ND	N	ug/L	10	"	10/01/1998 TMJ
Indeno(123-cd)pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Isodrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Isophorone	ND		ug/L	5	"	10/01/1998 TMJ
Isosafrole	ND	N	ug/L	10	"	10/01/1998 TMJ
Kepone	ND	N	ug/L	10	"	10/01/1998 TMJ
Methapyrilene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methoxychlor	ND	N	ug/L	10	"	10/01/1998 TMJ
3-Methylcholanthrene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Methylnaphthalene	ND		ug/L	5	"	10/01/1998 TMJ
Methyl Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Naphthalene	ND		ug/L	5	"	10/01/1998 TMJ
1,4-Naphthoquinone	ND	N	ug/L	10	"	10/01/1998 TMJ
1-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
3-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
4-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
Nitrobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2-Nitrophenol	ND		ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8682	Matrix:	Water / Grab
Client Sample:	SP-5-98 A	Location:	Whiterock CY
COLLECTED:	09/22/1998 11:05	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
4-Nitrophenol	ND		ug/L	20	SW-846 Mtd. 8270C	10/01/1998 TMJ
4-Nitroquinoline 1-oxide	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-n-Butylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodiethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodimethylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosodiphenylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosomethylethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosomorpholine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosopiperidine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-propylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosopyrrolidine	ND	N	ug/L	10	"	10/01/1998 TMJ
5-Nitro-o-toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachloronitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
Phenacetin	ND	N	ug/L	10	"	10/01/1998 TMJ
Phenanthrene	ND		ug/L	5	"	10/01/1998 TMJ
Phenol	ND		ug/L	5	"	10/01/1998 TMJ
p-Phenylenediamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Phorate	ND	N	ug/L	10	"	10/01/1998 TMJ
Pronamide	ND	N	ug/L	10	"	10/01/1998 TMJ
Pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Pyridine	ND		ug/L	10	"	10/01/1998 TMJ
Safrole	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4,5-Tetrachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
2,3,4,6-Tetrachlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Tetraethyl dithiopyrophosphate	ND	N	ug/L	10	"	10/01/1998 TMJ
Thionazin	ND	N	ug/L	10	"	10/01/1998 TMJ
o-Toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4-Trichlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2,4,5-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,4,6-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
O,O,O-TriethylPhosphorothioate	ND	N	ug/L	10	"	10/01/1998 TMJ
sym-Trinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8682	Matrix:	Water	/ Grab
Client Sample:	SP-5-98 A	Location:	Whiterock CY	
COLLECTED:	09/22/1998 11:05	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD	

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS					
Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Nitrobenzene-d5	31	%	13-101	SW-846 Mtd. 8270C	10/01/1998 TMJ
2-Fluorobiphenyl	35	%	1-141	"	10/01/1998 TMJ
p-Terphenyl-d14	79	%	7-160	"	10/01/1998 TMJ
Phenol-d5	16	%	9-138	"	10/01/1998 TMJ
2-Fluorophenol	18	%	1-131	"	10/01/1998 TMJ
2,4,6-Tribromophenol	59	%	15-141	"	10/01/1998 TMJ
ORGANIC PREPS					
Semi Volatile Extraction	-	-	-	SW-846 Mtd. 3510C	09/28/1998 FM

ND = Non Detectable

Project Manager

Jason A. Asher

Reported : 11/11/1998

Sample:	84464-8683	Matrix:	Water / Grab
Client Sample:	Trip Blank	Location:	Whiterock CY
COLLECTED:	09/22/1998 11:05	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC						
Acetone	ND		ug/L	5	SW-846 Mtd. 8260B	10/02/1998 PJG
Acrolein	ND		ug/L	5	"	10/02/1998 PJG
Acrylonitrile	ND		ug/L	5	"	10/02/1998 PJG
Allyl Chloride	ND		ug/L	5	"	10/02/1998 PJG
Benzene	ND		ug/L	1	"	10/02/1998 PJG
Bromodichloromethane	ND		ug/L	1	"	10/02/1998 PJG
Bromoform	ND		ug/L	1	"	10/02/1998 PJG
Bromomethane	ND		ug/L	1	"	10/02/1998 PJG
Carbon Disulfide	ND		ug/L	1	"	10/02/1998 PJG
Carbon Tetrachloride	ND		ug/L	1	"	10/02/1998 PJG
Chlorobenzene	ND		ug/L	1	"	10/02/1998 PJG
Chloroethane	ND		ug/L	1	"	10/02/1998 PJG
Chloroform	ND		ug/L	1	"	10/02/1998 PJG
Chloromethane	ND		ug/L	1	"	10/02/1998 PJG
Chloroprene	ND	N	ug/L	5	"	10/02/1998 PJG
Dibromochloromethane	ND		ug/L	1	"	10/02/1998 PJG
1,2-Dibromo-3-Chloropropane	ND		ug/L	1	"	10/02/1998 PJG
1,2-Dibromoethane	ND		ug/L	1	"	10/02/1998 PJG
1,2-Dichlorobenzene	ND		ug/L	1	"	10/02/1998 PJG
1,3-Dichlorobenzene	ND		ug/L	1	"	10/02/1998 PJG
1,4-Dichlorobenzene	ND		ug/L	1	"	10/02/1998 PJG
t-1,4-Dichloro-2 butene	ND	N	ug/L	5	"	10/02/1998 PJG
Dichlorodifluoromethane	ND		ug/L	1	"	10/02/1998 PJG
1,1-Dichloroethane	ND		ug/L	1	"	10/02/1998 PJG
1,2-Dichloroethane	ND		ug/L	1	"	10/02/1998 PJG
1,1-Dichloroethene	ND		ug/L	1	"	10/02/1998 PJG
t-1,2-Dichloroethene	ND		ug/L	1	"	10/02/1998 PJG
1,2-Dichloropropane	ND		ug/L	1	"	10/02/1998 PJG
c-1,3-Dichloropropene	ND		ug/L	1	"	10/02/1998 PJG
t-1,3-Dichloropropene	ND		ug/L	1	"	10/02/1998 PJG
Ethylbenzene	ND		ug/L	1	"	10/02/1998 PJG
Ethyl Methacrylate	ND	N	ug/L	5	"	10/02/1998 PJG
2-Hexanone	ND		ug/L	5	"	10/02/1998 PJG
Methacrylonitrile	ND	N	ug/L	5	"	10/02/1998 PJG
Methylene Bromide	ND		ug/L	1	"	10/02/1998 PJG

ND = Non Detectable

Reported : 11/11/1998

Sample:	84464-8683	Matrix:	Water / Grab
Client Sample:	Trip Blank	Location:	Whiterock CY
COLLECTED:	09/22/1998 11:05	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/24/1998 11:30	Sampled By:	JRY,MRD,KD

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC						
Methylene Chloride	ND		ug/L	1	SW-846 Mtd. 8260B	10/02/1998 PJG
Methyl Ethyl Ketone	ND		ug/L	5	"	10/02/1998 PJG
Methyl Iodide	ND		ug/L	1	"	10/02/1998 PJG
Methyl Methacrylate	ND	N	ug/L	5	"	10/02/1998 PJG
4-Methyl-2-pentanone (MIBK)	ND		ug/L	5	"	10/02/1998 PJG
Pentachloroethane	ND	N	ug/L	5	"	10/02/1998 PJG
2-Picoline	ND	N	ug/L	5	"	10/02/1998 PJG
Propionitrile	ND	N	ug/L	5	"	10/02/1998 PJG
Styrene	ND		ug/L	1	"	10/02/1998 PJG
1,1,1,2-Tetrachloroethane	ND		ug/L	1	"	10/02/1998 PJG
1,1,2,2-Tetrachloroethane	ND		ug/L	1	"	10/02/1998 PJG
Tetrachloroethene	ND		ug/L	1	"	10/02/1998 PJG
Toluene	ND		ug/L	1	"	10/02/1998 PJG
1,1,1-Trichloroethane	ND		ug/L	1	"	10/02/1998 PJG
1,1,2-Trichloroethane	ND		ug/L	1	"	10/02/1998 PJG
Trichloroethene	ND		ug/L	1	"	10/02/1998 PJG
Trichlorofluoromethane	ND		ug/L	1	"	10/02/1998 PJG
1,2,3-Trichloropropane	ND		ug/L	1	"	10/02/1998 PJG
Vinyl Acetate	ND		ug/L	5	"	10/02/1998 PJG
Vinyl Chloride	ND		ug/L	1	"	10/02/1998 PJG
Xylene (Total)	ND		ug/L	3	"	10/02/1998 PJG

Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Dibromofluoromethane	113	%	81-117	"	10/02/1998 PJG
Toluene-d8	102	%	87-114	"	10/02/1998 PJG
Bromofluorobenzene	101	%	84-108	"	10/02/1998 PJG

ND = Non Detectable

Project Manager

Jason A. Asher

Reported : 11/11/1998

CT&E Environmental Services Inc.

Anatech Division
Analytical Report

Lab I.D. :	84492
Report Date :	11/12/1998
Project :	9.98-WRC Springs (HRMB)
Client :	NMED-HRMB
	20449 Galisteo
	Sante Fe, NM 87505
Attention :	Mr. John Young

51 pages including cover sheet

Anatech Division
1200 Conrad Ind. Dr.
Ludington, MI 49431

616-843-1877 - Phone
616-845-9942 - Fax

CT&E Environmental Services Inc.

NMED-HRMB

Sample:	84492-8739	Matrix:	Water / Grab
Client Sample:	SP-10-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 09:17	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
TOTAL METALS ANALYSIS					
Aluminum (ICAP)	0.3 B	mg/L	0.1	SW-846 Mtd. 6010B	09/30/1998 JC
Antimony (ICAP)	ND	mg/L	0.01	"	10/01/1998 JC
Arsenic (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Barium (ICAP)	0.025	mg/L	0.005	"	09/30/1998 JC
Beryllium (ICAP)	ND	mg/L	0.001	"	10/01/1998 JC
Cadmium (ICAP)	ND	mg/L	0.001	"	10/01/1998 JC
Calcium (ICAP)	15	mg/L	0.2	"	09/30/1998 JC
Chromium, Total (ICAP)	ND	mg/L	0.05	"	09/30/1998 JC
Cobalt (ICAP)	ND	mg/L	0.001	"	10/01/1998 JC
Copper (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
Iron (ICAP)	ND	mg/L	0.1	"	09/30/1998 JC
Lead (ICAP)	ND	mg/L	0.005	"	10/01/1998 JC
Magnesium (ICAP)	3.0	mg/L	0.03	"	09/30/1998 JC
Manganese (ICAP)	0.007	mg/L	0.003	"	09/30/1998 JC
Mercury (Cold Vapor)	ND	mg/L	0.0002	SW-846 Mtd. 7470A	10/02/1998 SMM
Nickel (ICAP)	ND	mg/L	0.005	SW-846 Mtd. 6010B	10/01/1998 JC
Potassium (Flame)	1.4	mg/L	0.5	SW-846 Mtd. 7610	09/30/1998 SMM
Selenium (ICAP)	ND	mg/L	0.02	SW-846 Mtd. 6010B	09/30/1998 JC
Silver (ICAP)	ND	mg/L	0.0005	"	09/30/1998 JC
Sodium (ICAP)	12	mg/L	0.5	"	09/30/1998 JC
Thallium (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
Vanadium (ICAP)	0.01	mg/L	0.01	"	09/30/1998 JC
Zinc (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
GENERAL CHEMISTRY					
Alkalinity, Bicarbonate	41	mg/L	10	Standard Mtd. 2320 B	10/05/1998 LS
Alkalinity, Carbonate	32	mg/L	10	"	10/05/1998 LS
Alkalinity, Total	73	mg/L	10	"	10/05/1998 LS
Ammonia-Nitrogen	ND	mg/L	0.06	EPA 350.1	10/01/1998 KA
Cyanide, Total	ND	mg/L	0.005	SW-846 Mtd. 9010 A	10/02/1998 LS
Kjeldahl-Nitrogen	0.4	mg/L	0.1	EPA 351.2	10/02/1998 LS
Total Organic Carbon (TOC)	ND	mg/L	1	EPA 415.1	11/12/1998 JL
Total Phosphorus	0.033	mg/L	0.004	EPA 365.1	09/30/1998 KA

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8739	Matrix:	Water / Grab
Client Sample:	SP-10-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 09:17	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
PHYSICAL PROPERTY ANALYSIS						
Solids, Dissolved	200		mg/L	10	Standard Method 2540C	09/29/1998 JL
Solids, Suspended	14		mg/L	1	EPA 160.2	09/29/1998 JL
INORGANIC PREPS						
Cold Vapor Preparation	-		-	-	SW-846 Mtd. 7470A	10/02/1998 SMM
ICP Digestion	-		-	-	SW-846 Mtd. 3010A	09/29/1998 BLM
ICP/GFAA Digestion (Antimony)	-		-	-	SW-846 Mtd. 3005A	09/29/1998 BLM
ICP/GFAA Digestion (Silver)	-		-	-	SW-846 Mtd. 7760A	09/29/1998 BLM
GC/MS VOLATILE ORGANIC						
Acetone	ND		ug/L	5	SW-846 Mtd. 8260B	10/03/1998 PJG
Acrolein	ND		ug/L	5	"	10/03/1998 PJG
Acrylonitrile	ND		ug/L	5	"	10/03/1998 PJG
Allyl Chloride	ND		ug/L	1	"	10/03/1998 PJG
Benzene	ND		ug/L	1	"	10/03/1998 PJG
Bromodichloromethane	ND		ug/L	1	"	10/03/1998 PJG
Bromoform	ND		ug/L	1	"	10/03/1998 PJG
Bromomethane	ND		ug/L	1	"	10/03/1998 PJG
Carbon Disulfide	ND		ug/L	1	"	10/03/1998 PJG
Carbon Tetrachloride	ND		ug/L	1	"	10/03/1998 PJG
Chlorobenzene	ND		ug/L	1	"	10/03/1998 PJG
Chloroethane	ND		ug/L	1	"	10/03/1998 PJG
Chloroform	ND		ug/L	1	"	10/03/1998 PJG
Chloromethane	ND		ug/L	1	"	10/03/1998 PJG
Chloroprene	ND	N	ug/L	5	"	10/03/1998 PJG
Dibromochloromethane	ND		ug/L	1	"	10/03/1998 PJG
1,2-Dibromo-3-Chloropropane	ND		ug/L	1	"	10/03/1998 PJG
1,2-Dibromoethane	ND		ug/L	1	"	10/03/1998 PJG
1,2-Dichlorobenzene	ND		ug/L	1	"	10/03/1998 PJG
1,3-Dichlorobenzene	ND		ug/L	1	"	10/03/1998 PJG
1,4-Dichlorobenzene	ND		ug/L	1	"	10/03/1998 PJG
t-1,4-Dichloro-2 butene	ND	N	ug/L	5	"	10/03/1998 PJG
Dichlorodifluoromethane	ND		ug/L	1	"	10/03/1998 PJG
1,1-Dichloroethane	ND		ug/L	1	"	10/03/1998 PJG
1,2-Dichloroethane	ND		ug/L	1	"	10/03/1998 PJG

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8739	Matrix:	Water / Grab
Client Sample:	SP-10-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 09:17	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC						
1,1-Dichloroethene	ND		ug/L	1	SW-846 Mtd. 8260B	10/03/1998 PJG
t-1,2-Dichloroethene	ND		ug/L	1	"	10/03/1998 PJG
1,2-Dichloropropane	ND		ug/L	1	"	10/03/1998 PJG
c-1,3-Dichloropropene	ND		ug/L	1	"	10/03/1998 PJG
t-1,3-Dichloropropene	ND		ug/L	1	"	10/03/1998 PJG
Ethylbenzene	ND		ug/L	1	"	10/03/1998 PJG
Ethyl Methacrylate	ND	N	ug/L	5	"	10/03/1998 PJG
2-Hexanone	ND		ug/L	5	"	10/03/1998 PJG
Methacrylonitrile	ND	N	ug/L	5	"	10/03/1998 PJG
Methylene Bromide	ND		ug/L	1	"	10/03/1998 PJG
Methylene Chloride	ND		ug/L	1	"	10/03/1998 PJG
Methyl Ethyl Ketone	ND		ug/L	5	"	10/03/1998 PJG
Methyl Iodide	ND		ug/L	1	"	10/03/1998 PJG
Methyl Methacrylate	ND	N	ug/L	5	"	10/03/1998 PJG
4-Methyl-2-pentanone (MIBK)	ND		ug/L	5	"	10/03/1998 PJG
Pentachloroethane	ND	N	ug/L	5	"	10/03/1998 PJG
2-Picoline	ND	N	ug/L	5	"	10/03/1998 PJG
Propionitrile	ND	N	ug/L	5	"	10/03/1998 PJG
Styrene	ND		ug/L	1	"	10/03/1998 PJG
1,1,1,2-Tetrachloroethane	ND		ug/L	1	"	10/03/1998 PJG
1,1,2,2-Tetrachloroethane	ND		ug/L	1	"	10/03/1998 PJG
Tetrachloroethene	ND		ug/L	1	"	10/03/1998 PJG
Toluene	ND		ug/L	1	"	10/03/1998 PJG
1,1,1-Trichloroethane	ND		ug/L	1	"	10/03/1998 PJG
1,1,2-Trichloroethane	ND		ug/L	1	"	10/03/1998 PJG
Trichloroethene	ND		ug/L	1	"	10/03/1998 PJG
Trichlorofluoromethane	ND		ug/L	1	"	10/03/1998 PJG
1,2,3-Trichloropropane	ND		ug/L	1	"	10/03/1998 PJG
Vinyl Acetate	ND		ug/L	5	"	10/03/1998 PJG
Vinyl Chloride	ND		ug/L	1	"	10/03/1998 PJG
Xylene (Total)	ND		ug/L	3	"	10/03/1998 PJG

Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Dibromofluoromethane	106	%	81-117	"	10/03/1998 PJG
Toluene-d8	90	%	87-114	"	10/03/1998 PJG

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8739	Matrix:	Water / Grab
Client Sample:	SP-10-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 09:17	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC					
Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Bromofluorobenzene	91	%	84-108	SW-846 Mtd. 8260B	10/03/1998 PJG
GC/MS SEMIVOLATILE ORGANICS					
Acenaphthene	ND	ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
Acenaphthylene	ND	ug/L	5	"	10/01/1998 TMJ
Acetophenone	ND N	ug/L	10	"	10/01/1998 TMJ
2-Acetylaminofluorene	ND N	ug/L	10	"	10/01/1998 TMJ
Aldrin	ND N	ug/L	10	"	10/01/1998 TMJ
alpha-BHC	ND N	ug/L	10	"	10/01/1998 TMJ
4-Aminobiphenyl	ND N	ug/L	10	"	10/01/1998 TMJ
Aniline	ND	ug/L	10	"	10/01/1998 TMJ
Anthracene	ND	ug/L	5	"	10/01/1998 TMJ
Aramite	ND N	ug/L	10	"	10/01/1998 TMJ
Benzo(a)anthracene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(b)fluoranthene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(k)fluoranthene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(g,h,i)perylene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(a)pyrene	ND	ug/L	5	"	10/01/1998 TMJ
Benzyl Alcohol	ND	ug/L	20	"	10/01/1998 TMJ
beta-BHC	ND N	ug/L	40	"	10/01/1998 TMJ
Bis(2-chloroethoxy)methane	ND	ug/L	5	"	10/01/1998 TMJ
Bis(2-chloroethyl)ether	ND	ug/L	5	"	10/01/1998 TMJ
Bis(2chloro1methylethyl)ether	ND N	ug/L	10	"	10/01/1998 TMJ
Bis(2-ethylhexyl)phthalate	ND	ug/L	5	"	10/01/1998 TMJ
4-Bromophenylphenyl ether	ND	ug/L	5	"	10/01/1998 TMJ
Butyl benzyl phthalate	ND	ug/L	5	"	10/01/1998 TMJ
Chlordane	ND N	ug/L	10	"	10/01/1998 TMJ
4-Chloroaniline	ND	ug/L	20	"	10/01/1998 TMJ
Chlorobenzilate	ND N	ug/L	10	"	10/01/1998 TMJ
4-Chloro-3-methylphenol	ND	ug/L	5	"	10/01/1998 TMJ
2-Chloronaphthalene	ND	ug/L	5	"	10/01/1998 TMJ
2-Chlorophenol	ND	ug/L	5	"	10/01/1998 TMJ
4-Chlorophenylphenyl ether	ND	ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8739	Matrix:	Water / Grab
Client Sample:	SP-10-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 09:17	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Chrysene	ND		ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
m&p-Cresol	ND		ug/L	10	"	10/01/1998 TMJ
o-Cresol	ND		ug/L	5	"	10/01/1998 TMJ
4,4'-DDD	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDE	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDT	ND	N	ug/L	10	"	10/01/1998 TMJ
delta-BHC	ND	N	ug/L	30	"	10/01/1998 TMJ
Diallate	ND	N	ug/L	10	"	10/01/1998 TMJ
Dibenzo(a,h)anthracene	ND		ug/L	5	"	10/01/1998 TMJ
Dibenzofuran	ND		ug/L	5	"	10/01/1998 TMJ
3,3-Dichlorobenzidine	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dichlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Dieldrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Diethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Dimethoate	ND	N	ug/L	10	"	10/01/1998 TMJ
p-(Dimethylamino)azobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
7,12-Dimethylbenz(a)anthracene	ND	N	ug/L	10	"	10/01/1998 TMJ
3,3-Dimethylbenzidine	ND	N	ug/L	10	"	10/01/1998 TMJ
a,a-Dimethylphenethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2,4-Dimethylphenol	ND		ug/L	5	"	10/01/1998 TMJ
Dimethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-Butyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-octyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
m-Dinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
4,6-Dinitro-o-cresol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrophenol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
Dinoseb	ND	N	ug/L	10	"	10/01/1998 TMJ
Diphenylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Disulfoton	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan I	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan II	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan sulfate	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8739	Matrix:	Water / Grab
Client Sample:	SP-10-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 09:17	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Endrin	ND	N	ug/L	10	SW-846 Mtd. 8270C	10/01/1998 TMJ
Endrin aldehyde	ND	N	ug/L	10	"	10/01/1998 TMJ
Ethyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
Famphur	ND	N	ug/L	10	"	10/01/1998 TMJ
Fluoranthene	ND		ug/L	5	"	10/01/1998 TMJ
Fluorene	ND		ug/L	5	"	10/01/1998 TMJ
gamma-BHC (Lindane)	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor Epoxide	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorobutadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorocyclopentadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachloroethane	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorophene	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachloropropene	ND	N	ug/L	10	"	10/01/1998 TMJ
Indeno(123-cd)pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Isodrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Isophorone	ND		ug/L	5	"	10/01/1998 TMJ
Isosafrole	ND	N	ug/L	10	"	10/01/1998 TMJ
Kepone	ND	N	ug/L	10	"	10/01/1998 TMJ
Methapyrilene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methoxychlor	ND	N	ug/L	10	"	10/01/1998 TMJ
3-Methylcholanthrene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Methylnaphthalene	ND		ug/L	5	"	10/01/1998 TMJ
Methyl Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Naphthalene	ND		ug/L	5	"	10/01/1998 TMJ
1,4-Naphthoquinone	ND	N	ug/L	10	"	10/01/1998 TMJ
1-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
3-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
4-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
Nitrobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2-Nitrophenol	ND		ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8739	Matrix:	Water / Grab
Client Sample:	SP-10-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 09:17	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
4-Nitrophenol	ND		ug/L	20	SW-846 Mtd. 8270C	10/01/1998 TMJ
4-Nitroquinoline 1-oxide	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-n-Butylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodiethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodimethylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosodiphenylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosomethylethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosomorpholine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosopiperidine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-propylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosopyrrolidine	ND	N	ug/L	10	"	10/01/1998 TMJ
5-Nitro-o-toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachloronitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
Phenacetin	ND	N	ug/L	10	"	10/01/1998 TMJ
Phenanthrene	ND		ug/L	5	"	10/01/1998 TMJ
Phenol	ND		ug/L	5	"	10/01/1998 TMJ
p-Phenylenediamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Phorate	ND	N	ug/L	10	"	10/01/1998 TMJ
Pronamide	ND	N	ug/L	10	"	10/01/1998 TMJ
Pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Pyridine	ND		ug/L	10	"	10/01/1998 TMJ
Safrole	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4,5-Tetrachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
2,3,4,6-Tetrachlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Tetraethyl dithiopyrophosphate	ND	N	ug/L	10	"	10/01/1998 TMJ
Thionazin	ND	N	ug/L	10	"	10/01/1998 TMJ
o-Toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4-Trichlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2,4,5-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,4,6-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
O,O,O-TriethylPhosphorothioate	ND	N	ug/L	10	"	10/01/1998 TMJ
sym-Trinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8739	Matrix:	Water / Grab
Client Sample:	SP-10-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 09:17	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS					
Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Nitrobenzene-d5	75	%	13-101	SW-846 Mtd. 8270C	10/01/1998 TMJ
2-Fluorobiphenyl	70	%	1-141	"	10/01/1998 TMJ
p-Terphenyl-d14	77	%	7-160	"	10/01/1998 TMJ
Phenol-d5	32	%	9-138	"	10/01/1998 TMJ
2-Fluorophenol	39	%	1-131	"	10/01/1998 TMJ
2,4,6-Tribromophenol	81	%	15-141	"	10/01/1998 TMJ
ORGANIC PREPS					
Semi Volatile Extraction	-	-	-	SW-846 Mtd. 3510C	09/29/1998 FM

ND = Non Detectable

Project Manager

Jason A. Asher

Reported : 11/12/1998

Sample:	84492-8740	Matrix:	Water / Grab
Client Sample:	SP-DOE10-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 12:10	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
TOTAL METALS ANALYSIS						
Aluminum (ICAP)	0.4	B	mg/L	0.1	SW-846 Mtd. 6010B	09/30/1998 JC
Antimony (ICAP)	ND		mg/L	0.01	"	09/30/1998 JC
Arsenic (ICAP)	ND		mg/L	0.01	"	09/30/1998 JC
Barium (ICAP)	0.017		mg/L	0.005	"	09/30/1998 JC
Beryllium (ICAP)	0.001		mg/L	0.001	"	09/30/1998 JC
Cadmium (ICAP)	ND		mg/L	0.001	"	09/30/1998 JC
Calcium (ICAP)	9.9		mg/L	0.2	"	09/30/1998 JC
Chromium, Total (ICAP)	ND		mg/L	0.05	"	09/30/1998 JC
Cobalt (ICAP)	ND		mg/L	0.001	"	09/30/1998 JC
Copper (ICAP)	ND		mg/L	0.02	"	09/30/1998 JC
Iron (ICAP)	0.2		mg/L	0.1	"	09/30/1998 JC
Lead (ICAP)	ND		mg/L	0.005	"	09/30/1998 JC
Magnesium (ICAP)	2.8		mg/L	0.03	"	09/30/1998 JC
Manganese (ICAP)	0.008		mg/L	0.003	"	09/30/1998 JC
Mercury (Cold Vapor)	ND		mg/L	0.0002	SW-846 Mtd. 7470A	10/02/1998 SMM
Nickel (ICAP)	ND		mg/L	0.005	SW-846 Mtd. 6010B	09/30/1998 JC
Potassium (Flame)	1.2		mg/L	0.5	SW-846 Mtd. 7610	09/30/1998 SMM
Selenium (ICAP)	ND		mg/L	0.02	SW-846 Mtd. 6010B	09/30/1998 JC
Silver (ICAP)	ND		mg/L	0.0005	"	09/30/1998 JC
Sodium (ICAP)	11		mg/L	0.5	"	09/30/1998 JC
Thallium (ICAP)	ND		mg/L	0.02	"	09/30/1998 JC
Vanadium (ICAP)	ND		mg/L	0.01	"	09/30/1998 JC
Zinc (ICAP)	ND		mg/L	0.02	"	09/30/1998 JC
GENERAL CHEMISTRY						
Alkalinity, Bicarbonate	52		mg/L	10	Standard Mtd. 2320 B	10/05/1998 LS
Alkalinity, Carbonate	ND		mg/L	10	"	10/05/1998 LS
Alkalinity, Total	52		mg/L	10	"	10/05/1998 LS
Ammonia-Nitrogen	ND		mg/L	0.06	EPA 350.1	10/01/1998 KA
Cyanide, Total	ND		mg/L	0.005	SW-846 Mtd. 9010 A	10/02/1998 LS
Kjeldahl-Nitrogen	0.7		mg/L	0.1	EPA 351.2	10/02/1998 LS
Total Organic Carbon (TOC)	ND		mg/L	1	EPA 415.1	11/12/1998 JL
Total Phosphorus	0.018		mg/L	0.004	EPA 365.1	09/30/1998 KA

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8740	Matrix:	Water / Grab
Client Sample:	SP-DOE10-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 12:10	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
PHYSICAL PROPERTY ANALYSIS						
Solids, Dissolved	160		mg/L	10	Standard Method 2540C	09/29/1998 JL
Solids, Suspended	14		mg/L	1	EPA 160.2	09/29/1998 JL
INORGANIC PREPS						
Cold Vapor Preparation	-		-	-	SW-846 Mtd. 7470A	10/02/1998 SMM
ICP Digestion	-		-	-	SW-846 Mtd. 3010A	09/29/1998 BLM
ICP/GFAA Digestion (Antimony)	-		-	-	SW-846 Mtd. 3005A	09/29/1998 BLM
ICP/GFAA Digestion (Silver)	-		-	-	SW-846 Mtd. 7760A	09/29/1998 BLM
GC/MS VOLATILE ORGANIC						
Acetone	ND		ug/L	5	SW-846 Mtd. 8260B	10/03/1998 PJG
\crolein	ND		ug/L	5	"	10/03/1998 PJG
\crylonitrile	ND		ug/L	5	"	10/03/1998 PJG
Allyl Chloride	ND		ug/L	1	"	10/03/1998 PJG
Benzene	ND		ug/L	1	"	10/03/1998 PJG
Bromodichloromethane	ND		ug/L	1	"	10/03/1998 PJG
Bromoform	ND		ug/L	1	"	10/03/1998 PJG
Bromomethane	ND		ug/L	1	"	10/03/1998 PJG
Carbon Disulfide	ND		ug/L	1	"	10/03/1998 PJG
Carbon Tetrachloride	ND		ug/L	1	"	10/03/1998 PJG
Chlorobenzene	ND		ug/L	1	"	10/03/1998 PJG
Chloroethane	ND		ug/L	1	"	10/03/1998 PJG
Chloroform	ND		ug/L	1	"	10/03/1998 PJG
Chloromethane	ND		ug/L	1	"	10/03/1998 PJG
Chloroprene	ND	N	ug/L	5	"	10/03/1998 PJG
Dibromochloromethane	ND		ug/L	1	"	10/03/1998 PJG
1,2-Dibromo-3-Chloropropane	ND		ug/L	1	"	10/03/1998 PJG
1,2-Dibromoethane	ND		ug/L	1	"	10/03/1998 PJG
1,2-Dichlorobenzene	ND		ug/L	1	"	10/03/1998 PJG
1,3-Dichlorobenzene	ND		ug/L	1	"	10/03/1998 PJG
1,4-Dichlorobenzene	ND		ug/L	1	"	10/03/1998 PJG
t-1,4-Dichloro-2 butene	ND	N	ug/L	5	"	10/03/1998 PJG
Dichlorodifluoromethane	ND		ug/L	1	"	10/03/1998 PJG
1,1-Dichloroethane	ND		ug/L	1	"	10/03/1998 PJG
1,2-Dichloroethane	ND		ug/L	1	"	10/03/1998 PJG

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8740	Matrix:	Water / Grab
Client Sample:	SP-DOE10-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 12:10	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC						
1,1-Dichloroethene	ND		ug/L	1	SW-846 Mtd. 8260B	10/03/1998 PJG
t-1,2-Dichloroethene	ND		ug/L	1	"	10/03/1998 PJG
1,2-Dichloropropane	ND		ug/L	1	"	10/03/1998 PJG
c-1,3-Dichloropropene	ND		ug/L	1	"	10/03/1998 PJG
t-1,3-Dichloropropene	ND		ug/L	1	"	10/03/1998 PJG
Ethylbenzene	ND		ug/L	1	"	10/03/1998 PJG
Ethyl Methacrylate	ND	N	ug/L	5	"	10/03/1998 PJG
2-Hexanone	ND		ug/L	5	"	10/03/1998 PJG
Methacrylonitrile	ND	N	ug/L	5	"	10/03/1998 PJG
Methylene Bromide	ND		ug/L	1	"	10/03/1998 PJG
Methylene Chloride	ND		ug/L	1	"	10/03/1998 PJG
Methyl Ethyl Ketone	ND		ug/L	5	"	10/03/1998 PJG
Methyl Iodide	ND		ug/L	1	"	10/03/1998 PJG
Methyl Methacrylate	ND	N	ug/L	5	"	10/03/1998 PJG
4-Methyl-2-pentanone (MIBK)	ND		ug/L	5	"	10/03/1998 PJG
Pentachloroethane	ND	N	ug/L	5	"	10/03/1998 PJG
2-Picoline	ND	N	ug/L	5	"	10/03/1998 PJG
Propionitrile	ND	N	ug/L	5	"	10/03/1998 PJG
Styrene	ND		ug/L	1	"	10/03/1998 PJG
1,1,1,2-Tetrachloroethane	ND		ug/L	1	"	10/03/1998 PJG
1,1,2,2-Tetrachloroethane	ND		ug/L	1	"	10/03/1998 PJG
Tetrachloroethene	ND		ug/L	1	"	10/03/1998 PJG
Toluene	ND		ug/L	1	"	10/03/1998 PJG
1,1,1-Trichloroethane	ND		ug/L	1	"	10/03/1998 PJG
1,1,2-Trichloroethane	ND		ug/L	1	"	10/03/1998 PJG
Trichloroethene	ND		ug/L	1	"	10/03/1998 PJG
Trichlorofluoromethane	ND		ug/L	1	"	10/03/1998 PJG
1,2,3-Trichloropropane	ND		ug/L	1	"	10/03/1998 PJG
Vinyl Acetate	ND		ug/L	5	"	10/03/1998 PJG
Vinyl Chloride	ND		ug/L	1	"	10/03/1998 PJG
Xylene (Total)	ND		ug/L	3	"	10/03/1998 PJG

Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Dibromofluoromethane	109	%	81-117	"	10/03/1998 PJG
Toluene-d8	92	%	87-114	"	10/03/1998 PJG

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8740	Matrix:	Water / Grab
Client Sample:	SP-DOE10-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 12:10	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC					
Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Bromofluorobenzene	92	%	84-108	SW-846 Mtd. 8260B	10/03/1998 PJG
GC/MS SEMIVOLATILE ORGANICS					
Acenaphthene	ND	ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
Acenaphthylene	ND	ug/L	5	"	10/01/1998 TMJ
Acetophenone	ND N	ug/L	10	"	10/01/1998 TMJ
2-Acetylaminofluorene	ND N	ug/L	10	"	10/01/1998 TMJ
Aldrin	ND N	ug/L	10	"	10/01/1998 TMJ
alpha-BHC	ND N	ug/L	10	"	10/01/1998 TMJ
4-Aminobiphenyl	ND N	ug/L	10	"	10/01/1998 TMJ
Aniline	ND	ug/L	10	"	10/01/1998 TMJ
Anthracene	ND	ug/L	5	"	10/01/1998 TMJ
Aramite	ND N	ug/L	10	"	10/01/1998 TMJ
Benzo(a)anthracene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(b)fluoranthene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(k)fluoranthene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(g,h,i)perylene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(a)pyrene	ND	ug/L	5	"	10/01/1998 TMJ
Benzyl Alcohol	ND	ug/L	20	"	10/01/1998 TMJ
beta-BHC	ND N	ug/L	40	"	10/01/1998 TMJ
Bis(2-chloroethoxy)methane	ND	ug/L	5	"	10/01/1998 TMJ
Bis(2-chloroethyl)ether	ND	ug/L	5	"	10/01/1998 TMJ
Bis(2chloro1methylethyl)ether	ND N	ug/L	10	"	10/01/1998 TMJ
Bis(2-ethylhexyl)phthalate	ND	ug/L	5	"	10/01/1998 TMJ
4-Bromophenylphenyl ether	ND	ug/L	5	"	10/01/1998 TMJ
Butyl benzyl phthalate	ND	ug/L	5	"	10/01/1998 TMJ
Chlordane	ND N	ug/L	10	"	10/01/1998 TMJ
4-Chloroaniline	ND	ug/L	20	"	10/01/1998 TMJ
Chlorobenzilate	ND N	ug/L	10	"	10/01/1998 TMJ
4-Chloro-3-methylphenol	ND	ug/L	5	"	10/01/1998 TMJ
2-Chloronaphthalene	ND	ug/L	5	"	10/01/1998 TMJ
2-Chlorophenol	ND	ug/L	5	"	10/01/1998 TMJ
4-Chlorophenylphenyl ether	ND	ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8740	Matrix:	Water / Grab
Client Sample:	SP-DOE10-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 12:10	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Chrysene	ND		ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
m&p-Cresol	ND		ug/L	10	"	10/01/1998 TMJ
o-Cresol	ND		ug/L	5	"	10/01/1998 TMJ
4,4'-DDD	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDE	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDT	ND	N	ug/L	10	"	10/01/1998 TMJ
delta-BHC	ND	N	ug/L	30	"	10/01/1998 TMJ
Diallate	ND	N	ug/L	10	"	10/01/1998 TMJ
Dibenzo(a,h)anthracene	ND		ug/L	5	"	10/01/1998 TMJ
Dibenzofuran	ND		ug/L	5	"	10/01/1998 TMJ
3,3-Dichlorobenzidine	ND		ug/L	20	"	10/01/1998 TMJ
',4-Dichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dichlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Dieldrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Diethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Dimethoate	ND	N	ug/L	10	"	10/01/1998 TMJ
p-(Dimethylamino)azobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
7,12-Dimethylbenz(a)anthracene	ND	N	ug/L	10	"	10/01/1998 TMJ
3,3-Dimethylbenzidine	ND	N	ug/L	10	"	10/01/1998 TMJ
a,a-Dimethylphenethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2,4-Dimethylphenol	ND		ug/L	5	"	10/01/1998 TMJ
Dimethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-Butyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-octyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
m-Dinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
4,6-Dinitro-o-cresol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrophenol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
Dinoseb	ND	N	ug/L	10	"	10/01/1998 TMJ
Diphenylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Disulfoton	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan I	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan II	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan sulfate	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8740	Matrix:	Water / Grab
Client Sample:	SP-DOE10-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 12:10	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Endrin	ND	N	ug/L	10	SW-846 Mtd. 8270C	10/01/1998 TMJ
Endrin aldehyde	ND	N	ug/L	10	"	10/01/1998 TMJ
Ethyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
Famphur	ND	N	ug/L	10	"	10/01/1998 TMJ
Fluoranthene	ND		ug/L	5	"	10/01/1998 TMJ
Fluorene	ND		ug/L	5	"	10/01/1998 TMJ
gamma-BHC (Lindane)	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor Epoxide	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorobutadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorocyclopentadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachloroethane	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorophene	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachloropropene	ND	N	ug/L	10	"	10/01/1998 TMJ
Indeno(123-cd)pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Isodrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Isophorone	ND		ug/L	5	"	10/01/1998 TMJ
Isosafrole	ND	N	ug/L	10	"	10/01/1998 TMJ
Kepone	ND	N	ug/L	10	"	10/01/1998 TMJ
Methapyrilene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methoxychlor	ND	N	ug/L	10	"	10/01/1998 TMJ
3-Methylcholanthrene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Methylnaphthalene	ND		ug/L	5	"	10/01/1998 TMJ
Methyl Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Naphthalene	ND		ug/L	5	"	10/01/1998 TMJ
1,4-Naphthoquinone	ND	N	ug/L	10	"	10/01/1998 TMJ
1-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
3-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
4-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
Nitrobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2-Nitrophenol	ND		ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8740	Matrix:	Water / Grab
Client Sample:	SP-DOE10-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 12:10	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
4-Nitrophenol	ND		ug/L	20	SW-846 Mtd. 8270C	10/01/1998 TMJ
4-Nitroquinoline 1-oxide	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-n-Butylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodiethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodimethylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosodiphenylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosomethylethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosomorpholine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosopiperidine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-propylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosopyrrolidine	ND	N	ug/L	10	"	10/01/1998 TMJ
-Nitro-o-toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
arathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachloronitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
Phenacetin	ND	N	ug/L	10	"	10/01/1998 TMJ
Phenanthrene	ND		ug/L	5	"	10/01/1998 TMJ
Phenol	ND		ug/L	5	"	10/01/1998 TMJ
p-Phenylenediamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Phorate	ND	N	ug/L	10	"	10/01/1998 TMJ
Pronamide	ND	N	ug/L	10	"	10/01/1998 TMJ
Pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Pyridine	ND		ug/L	10	"	10/01/1998 TMJ
Safrole	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4,5-Tetrachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
2,3,4,6-Tetrachlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Tetraethyl dithiopyrophosphate	ND	N	ug/L	10	"	10/01/1998 TMJ
Thionazin	ND	N	ug/L	10	"	10/01/1998 TMJ
o-Toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4-Trichlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2,4,5-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,4,6-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
O,O,O-TriethylPhosphorothioate	ND	N	ug/L	10	"	10/01/1998 TMJ
sym-Trinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8740	Matrix:	Water / Grab
Client Sample:	SP-DOE10-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 12:10	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS					
Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Nitrobenzene-d5	74	%	13-101	SW-846 Mtd. 8270C	10/01/1998 TMJ
2-Fluorobiphenyl	64	%	1-141	"	10/01/1998 TMJ
p-Terphenyl-d14	73	%	7-160	"	10/01/1998 TMJ
Phenol-d5	28	%	9-138	"	10/01/1998 TMJ
2-Fluorophenol	37	%	1-131	"	10/01/1998 TMJ
2,4,6-Tribromophenol	74	%	15-141	"	10/01/1998 TMJ
ORGANIC PREPS					
Semi Volatile Extraction	-	-	-	SW-846 Mtd. 3510C	09/29/1998 FM

ND = Non Detectable

Project Manager

Jason A. Asher

Reported : 11/12/1998

NMED-HRMB

Sample:	84492-8741	Matrix:	Water / Grab
Client Sample:	SP-9B-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 14:30	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
TOTAL METALS ANALYSIS					
Aluminum (ICAP)	0.2 B	mg/L	0.1	SW-846 Mtd. 6010B	09/30/1998 JC
Antimony (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Arsenic (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Barium (ICAP)	0.008	mg/L	0.005	"	09/30/1998 JC
Beryllium (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Cadmium (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Calcium (ICAP)	9.7	mg/L	0.2	"	09/30/1998 JC
Chromium, Total (ICAP)	ND	mg/L	0.05	"	09/30/1998 JC
Cobalt (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Copper (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
Iron (ICAP)	ND	mg/L	0.1	"	09/30/1998 JC
ead (ICAP)	ND	mg/L	0.005	"	09/30/1998 JC
Magnesium (ICAP)	2.9	mg/L	0.03	"	09/30/1998 JC
Manganese (ICAP)	ND	mg/L	0.003	"	09/30/1998 JC
Mercury (Cold Vapor)	ND	mg/L	0.0002	SW-846 Mtd. 7470A	10/02/1998 SMM
Nickel (ICAP)	ND	mg/L	0.005	SW-846 Mtd. 6010B	09/30/1998 JC
Potassium (Flame)	1.2	mg/L	0.5	SW-846 Mtd. 7610	09/30/1998 SMM
Selenium (ICAP)	ND	mg/L	0.02	SW-846 Mtd. 6010B	09/30/1998 JC
Silver (ICAP)	ND	mg/L	0.0005	"	09/30/1998 JC
Sodium (ICAP)	11	mg/L	0.5	"	09/30/1998 JC
Thallium (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
Vanadium (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Zinc (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
GENERAL CHEMISTRY					
Alkalinity, Bicarbonate	59	mg/L	10	Standard Mtd. 2320 B	10/05/1998 LS
Alkalinity, Carbonate	ND	mg/L	10	"	10/05/1998 LS
Alkalinity, Total	59	mg/L	10	"	10/05/1998 LS
Ammonia-Nitrogen	ND	mg/L	0.06	EPA 350.1	10/01/1998 KA
Cyanide, Total	ND	mg/L	0.005	SW-846 Mtd. 9010 A	10/02/1998 LS
Kjeldahl-Nitrogen	0.6	mg/L	0.1	EPA 351.2	10/02/1998 LS
Total Organic Carbon (TOC)	ND	mg/L	1	EPA 415.1	11/12/1998 JL
Total Phosphorus	0.018	mg/L	0.004	EPA 365.1	09/30/1998 KA

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8741	Matrix:	Water / Grab
Client Sample:	SP-9B-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 14:30	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
PHYSICAL PROPERTY ANALYSIS						
Solids, Dissolved	150		mg/L	10	Standard Method 2540C	09/29/1998 JL
Solids, Suspended	ND		mg/L	1	EPA 160.2	09/29/1998 JL
INORGANIC PREPS						
Cold Vapor Preparation	-		-	-	SW-846 Mtd. 7470A	10/02/1998 SMM
ICP Digestion	-		-	-	SW-846 Mtd. 3010A	09/29/1998 BLM
ICP/GFAA Digestion (Antimony)	-		-	-	SW-846 Mtd. 3005A	09/29/1998 BLM
ICP/GFAA Digestion (Silver)	-		-	-	SW-846 Mtd. 7760A	09/29/1998 BLM
GC/MS VOLATILE ORGANIC						
Acetone	ND		ug/L	5	SW-846 Mtd. 8260B	10/05/1998 PJG
crolein	ND		ug/L	5	"	10/05/1998 PJG
crylonitrile	ND		ug/L	5	"	10/05/1998 PJG
Allyl Chloride	ND		ug/L	1	"	10/05/1998 PJG
Benzene	ND		ug/L	1	"	10/05/1998 PJG
Bromodichloromethane	ND		ug/L	1	"	10/05/1998 PJG
Bromoform	ND		ug/L	1	"	10/05/1998 PJG
Bromomethane	ND		ug/L	1	"	10/05/1998 PJG
Carbon Disulfide	ND		ug/L	1	"	10/05/1998 PJG
Carbon Tetrachloride	ND		ug/L	1	"	10/05/1998 PJG
Chlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
Chloroethane	ND		ug/L	1	"	10/05/1998 PJG
Chloroform	ND		ug/L	1	"	10/05/1998 PJG
Chloromethane	ND		ug/L	1	"	10/05/1998 PJG
Chloroprene	ND	N	ug/L	5	"	10/05/1998 PJG
Dibromochloromethane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dibromo-3-Chloropropane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dibromoethane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dichlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
1,3-Dichlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
1,4-Dichlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
t-1,4-Dichloro-2 butene	ND	N	ug/L	5	"	10/05/1998 PJG
Dichlorodifluoromethane	ND		ug/L	1	"	10/05/1998 PJG
1,1-Dichloroethane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dichloroethane	ND		ug/L	1	"	10/05/1998 PJG

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8741	Matrix:	Water / Grab
Client Sample:	SP-9B-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 14:30	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC						
1,1-Dichloroethene	ND		ug/L	1	SW-846 Mtd. 8260B	10/05/1998 PJG
t-1,2-Dichloroethene	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dichloropropane	ND		ug/L	1	"	10/05/1998 PJG
c-1,3-Dichloropropene	ND		ug/L	1	"	10/05/1998 PJG
t-1,3-Dichloropropene	ND		ug/L	1	"	10/05/1998 PJG
Ethylbenzene	ND		ug/L	1	"	10/05/1998 PJG
Ethyl Methacrylate	ND	N	ug/L	5	"	10/05/1998 PJG
2-Hexanone	ND		ug/L	5	"	10/05/1998 PJG
Methacrylonitrile	ND	N	ug/L	5	"	10/05/1998 PJG
Methylene Bromide	ND	N	ug/L	1	"	10/05/1998 PJG
Methylene Chloride	ND		ug/L	1	"	10/05/1998 PJG
Methyl Ethyl Ketone	ND		ug/L	5	"	10/05/1998 PJG
Methyl Iodide	ND		ug/L	1	"	10/05/1998 PJG
Methyl Methacrylate	ND	N	ug/L	5	"	10/05/1998 PJG
4-Methyl-2-pentanone (MIBK)	ND		ug/L	5	"	10/05/1998 PJG
Pentachloroethane	ND	N	ug/L	5	"	10/05/1998 PJG
2-Picoline	ND	N	ug/L	5	"	10/05/1998 PJG
Propionitrile	ND	N	ug/L	5	"	10/05/1998 PJG
Styrene	ND		ug/L	1	"	10/05/1998 PJG
1,1,1,2-Tetrachloroethane	ND		ug/L	1	"	10/05/1998 PJG
1,1,2,2-Tetrachloroethane	ND		ug/L	1	"	10/05/1998 PJG
Tetrachloroethene	ND		ug/L	1	"	10/05/1998 PJG
Toluene	ND		ug/L	1	"	10/05/1998 PJG
1,1,1-Trichloroethane	ND		ug/L	1	"	10/05/1998 PJG
1,1,2-Trichloroethane	ND		ug/L	1	"	10/05/1998 PJG
Trichloroethene	ND		ug/L	1	"	10/05/1998 PJG
Trichlorofluoromethane	ND		ug/L	1	"	10/05/1998 PJG
1,2,3-Trichloropropane	ND		ug/L	1	"	10/05/1998 PJG
Vinyl Acetate	ND		ug/L	5	"	10/05/1998 PJG
Vinyl Chloride	ND		ug/L	1	"	10/05/1998 PJG
Xylene (Total)	ND		ug/L	3	"	10/05/1998 PJG

Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Dibromofluoromethane	107	%	81-117	"	10/05/1998 PJG
Toluene-d8	100	%	87-114	"	10/05/1998 PJG

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8741	Matrix:	Water	/ Grab
Client Sample:	SP-9B-98	Location:	White Rock Canyon	
COLLECTED:	09/23/1998 14:30	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY	

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC						
Surrogate(s)	Result		Unit	Limits	Method	Date/Analyst
Bromofluorobenzene	98		%	84-108	SW-846 Mtd. 8260B	10/05/1998 PJG
GC/MS SEMIVOLATILE ORGANICS						
Acenaphthene	ND		ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
Acenaphthylene	ND		ug/L	5	"	10/01/1998 TMJ
Acetophenone	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Acetylaminofluorene	ND	N	ug/L	10	"	10/01/1998 TMJ
Aldrin	ND	N	ug/L	10	"	10/01/1998 TMJ
alpha-BHC	ND	N	ug/L	10	"	10/01/1998 TMJ
1-Aminobiphenyl	ND	N	ug/L	10	"	10/01/1998 TMJ
Aniline	ND		ug/L	10	"	10/01/1998 TMJ
Anthracene	ND		ug/L	5	"	10/01/1998 TMJ
Aramite	ND	N	ug/L	10	"	10/01/1998 TMJ
Benzo(a)anthracene	ND		ug/L	5	"	10/01/1998 TMJ
Benzo(b)fluoranthene	ND		ug/L	5	"	10/01/1998 TMJ
Benzo(k)fluoranthene	ND		ug/L	5	"	10/01/1998 TMJ
Benzo(g,h,i)perylene	ND		ug/L	5	"	10/01/1998 TMJ
Benzo(a)pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Benzyl Alcohol	ND		ug/L	20	"	10/01/1998 TMJ
beta-BHC	ND	N	ug/L	40	"	10/01/1998 TMJ
Bis(2-chloroethoxy)methane	ND		ug/L	5	"	10/01/1998 TMJ
Bis(2-chloroethyl)ether	ND		ug/L	5	"	10/01/1998 TMJ
Bis(2chloro1methylethyl)ether	ND	N	ug/L	10	"	10/01/1998 TMJ
Bis(2-ethylhexyl)phthalate	ND		ug/L	5	"	10/01/1998 TMJ
4-Bromophenylphenyl ether	ND		ug/L	5	"	10/01/1998 TMJ
Butyl benzyl phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Chlordane	ND	N	ug/L	10	"	10/01/1998 TMJ
4-Chloroaniline	ND		ug/L	20	"	10/01/1998 TMJ
Chlorobenzilate	ND	N	ug/L	10	"	10/01/1998 TMJ
4-Chloro-3-methylphenol	ND		ug/L	5	"	10/01/1998 TMJ
2-Chloronaphthalene	ND		ug/L	5	"	10/01/1998 TMJ
2-Chlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
4-Chlorophenylphenyl ether	ND		ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8741	Matrix:	Water / Grab
Client Sample:	SP-9B-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 14:30	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Chrysene	ND		ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
m&p-Cresol	ND		ug/L	10	"	10/01/1998 TMJ
o-Cresol	ND		ug/L	5	"	10/01/1998 TMJ
4,4'-DDD	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDE	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDT	ND	N	ug/L	10	"	10/01/1998 TMJ
delta-BHC	ND	N	ug/L	30	"	10/01/1998 TMJ
Diallate	ND	N	ug/L	10	"	10/01/1998 TMJ
Dibenzo(a,h)anthracene	ND		ug/L	5	"	10/01/1998 TMJ
Dibenzofuran	ND		ug/L	5	"	10/01/1998 TMJ
3,3-Dichlorobenzidine	ND		ug/L	20	"	10/01/1998 TMJ
,4-Dichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
,6-Dichlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Dieldrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Diethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Dimethoate	ND	N	ug/L	10	"	10/01/1998 TMJ
p-(Dimethylamino)azobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
7,12-Dimethylbenz(a)anthracene	ND	N	ug/L	10	"	10/01/1998 TMJ
3,3-Dimethylbenzidine	ND	N	ug/L	10	"	10/01/1998 TMJ
a,a-Dimethylphenethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2,4-Dimethylphenol	ND		ug/L	5	"	10/01/1998 TMJ
Dimethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-Butyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-octyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
m-Dinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
4,6-Dinitro-o-cresol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrophenol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
Dinoseb	ND	N	ug/L	10	"	10/01/1998 TMJ
Diphenylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Disulfoton	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan I	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan II	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan sulfate	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8741	Matrix:	Water / Grab
Client Sample:	SP-9B-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 14:30	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Endrin	ND	N	ug/L	10	SW-846 Mtd. 8270C	10/01/1998 TMJ
Endrin aldehyde	ND	N	ug/L	10	"	10/01/1998 TMJ
Ethyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
Famphur	ND	N	ug/L	10	"	10/01/1998 TMJ
Fluoranthene	ND		ug/L	5	"	10/01/1998 TMJ
Fluorene	ND		ug/L	5	"	10/01/1998 TMJ
gamma-BHC (Lindane)	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor Epoxide	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorobutadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorocyclopentadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachloroethane	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorophene	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachloropropene	ND	N	ug/L	10	"	10/01/1998 TMJ
Indeno(123-cd)pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Isodrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Isophorone	ND		ug/L	5	"	10/01/1998 TMJ
Isosafrole	ND	N	ug/L	10	"	10/01/1998 TMJ
Kepone	ND	N	ug/L	10	"	10/01/1998 TMJ
Methapyrilene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methoxychlor	ND	N	ug/L	10	"	10/01/1998 TMJ
3-Methylcholanthrene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Methylnaphthalene	ND		ug/L	5	"	10/01/1998 TMJ
Methyl Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Naphthalene	ND		ug/L	5	"	10/01/1998 TMJ
1,4-Naphthoquinone	ND	N	ug/L	10	"	10/01/1998 TMJ
1-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
3-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
4-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
Nitrobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2-Nitrophenol	ND		ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8741	Matrix:	Water / Grab
Client Sample:	SP-9B-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 14:30	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
4-Nitrophenol	ND		ug/L	20	SW-846 Mtd. 8270C	10/01/1998 TMJ
4-Nitroquinoline 1-oxide	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-n-Butylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodiethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodimethylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosodiphenylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosomethylethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosomorpholine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosopiperidine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-propylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosopyrrolidine	ND	N	ug/L	10	"	10/01/1998 TMJ
5-Nitro-o-toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachloronitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
Phenacetin	ND	N	ug/L	10	"	10/01/1998 TMJ
Phenanthrene	ND		ug/L	5	"	10/01/1998 TMJ
Phenol	ND		ug/L	5	"	10/01/1998 TMJ
p-Phenylenediamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Phorate	ND	N	ug/L	10	"	10/01/1998 TMJ
Pronamide	ND	N	ug/L	10	"	10/01/1998 TMJ
Pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Pyridine	ND		ug/L	10	"	10/01/1998 TMJ
Safrole	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4,5-Tetrachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
2,3,4,6-Tetrachlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Tetraethyl dithiopyrophosphate	ND	N	ug/L	10	"	10/01/1998 TMJ
Thionazin	ND	N	ug/L	10	"	10/01/1998 TMJ
o-Toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4-Trichlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2,4,5-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,4,6-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
O,O,O-TriethylPhosphorothioate	ND	N	ug/L	10	"	10/01/1998 TMJ
sym-Trinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8741	Matrix:	Water / Grab
Client Sample:	SP-9B-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 14:30	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS					
Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Nitrobenzene-d5	75	%	13-101	SW-846 Mtd. 8270C	10/01/1998 TMJ
2-Fluorobiphenyl	65	%	1-141	"	10/01/1998 TMJ
p-Terphenyl-d14	76	%	7-160	"	10/01/1998 TMJ
Phenol-d5	28	%	9-138	"	10/01/1998 TMJ
2-Fluorophenol	34	%	1-131	"	10/01/1998 TMJ
2,4,6-Tribromophenol	85	%	15-141	"	10/01/1998 TMJ
ORGANIC PREPS					
Semi Volatile Extraction	-	-	-	SW-846 Mtd. 3510C	09/29/1998 FM

ND = Non Detectable

Project Manager

Jason A. Asher

Reported : 11/12/1998

Sample:	84492-8742	Matrix:	Water / Grab
Client Sample:	SP-6-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 11:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
TOTAL METALS ANALYSIS					
Aluminum (ICAP)	0.3 B	mg/L	0.1	SW-846 Mtd. 6010B	09/30/1998 JC
Antimony (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Arsenic (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Barium (ICAP)	0.029	mg/L	0.005	"	09/30/1998 JC
Beryllium (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Cadmium (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Calcium (ICAP)	12	mg/L	0.2	"	09/30/1998 JC
Chromium, Total (ICAP)	ND	mg/L	0.05	"	09/30/1998 JC
Cobalt (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Copper (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
Iron (ICAP)	ND	mg/L	0.1	"	09/30/1998 JC
Lead (ICAP)	ND	mg/L	0.005	"	10/01/1998 JC
Magnesium (ICAP)	3.4	mg/L	0.03	"	09/30/1998 JC
Manganese (ICAP)	ND	mg/L	0.003	"	09/30/1998 JC
Mercury (Cold Vapor)	ND	mg/L	0.0002	SW-846 Mtd. 7470A	10/02/1998 SMM
Nickel (ICAP)	ND	mg/L	0.005	SW-846 Mtd. 6010B	09/30/1998 JC
Potassium (Flame)	1.7	mg/L	0.5	SW-846 Mtd. 7610	09/30/1998 SMM
Selenium (ICAP)	ND	mg/L	0.02	SW-846 Mtd. 6010B	09/30/1998 JC
Silver (ICAP)	ND	mg/L	0.0005	"	09/30/1998 JC
Sodium (ICAP)	11	mg/L	0.5	"	09/30/1998 JC
Thallium (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
Vanadium (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Zinc (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
GENERAL CHEMISTRY					
Alkalinity, Bicarbonate	69	mg/L	10	Standard Mtd. 2320 B	10/05/1998 LS
Alkalinity, Carbonate	ND	mg/L	10	"	10/05/1998 LS
Alkalinity, Total	69	mg/L	10	"	10/05/1998 LS
Ammonia-Nitrogen	ND	mg/L	0.06	EPA 350.1	10/01/1998 KA
Cyanide, Total	ND	mg/L	0.005	SW-846 Mtd. 9010 A	10/02/1998 LS
Kjeldahl-Nitrogen	0.2	mg/L	0.1	EPA 351.2	10/02/1998 LS
Total Organic Carbon (TOC)	ND	mg/L	1	EPA 415.1	11/12/1998 JL
Total Phosphorus	0.020	mg/L	0.004	EPA 365.1	09/30/1998 KA

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8742	Matrix:	Water / Grab
Client Sample:	SP-6-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 11:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
PHYSICAL PROPERTY ANALYSIS						
Solids, Dissolved	90		mg/L	10	Standard Method 2540C	09/29/1998 JL
Solids, Suspended	6		mg/L	1	EPA 160.2	09/29/1998 JL
INORGANIC PREPS						
Cold Vapor Preparation	-		-	-	SW-846 Mtd. 7470A	10/02/1998 SMM
ICP Digestion	-		-	-	SW-846 Mtd. 3010A	09/29/1998 BLM
ICP/GFAA Digestion (Antimony)	-		-	-	SW-846 Mtd. 3005A	09/29/1998 BLM
ICP/GFAA Digestion (Silver)	-		-	-	SW-846 Mtd. 7760A	09/29/1998 BLM
GC/MS VOLATILE ORGANIC						
Acetone	ND		ug/L	5	SW-846 Mtd. 8260B	10/05/1998 PJG
\crolein	ND		ug/L	5	"	10/05/1998 PJG
ıcrylonitrile	ND		ug/L	5	"	10/05/1998 PJG
Allyl Chloride	ND		ug/L	1	"	10/05/1998 PJG
Benzene	ND		ug/L	1	"	10/05/1998 PJG
Bromodichloromethane	ND		ug/L	1	"	10/05/1998 PJG
Bromoform	ND		ug/L	1	"	10/05/1998 PJG
Bromomethane	ND		ug/L	1	"	10/05/1998 PJG
Carbon Disulfide	ND		ug/L	1	"	10/05/1998 PJG
Carbon Tetrachloride	ND		ug/L	1	"	10/05/1998 PJG
Chlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
Chloroethane	ND		ug/L	1	"	10/05/1998 PJG
Chloroform	ND		ug/L	1	"	10/05/1998 PJG
Chloromethane	ND		ug/L	1	"	10/05/1998 PJG
Chloroprene	ND	N	ug/L	5	"	10/05/1998 PJG
Dibromochloromethane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dibromo-3-Chloropropane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dibromoethane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dichlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
1,3-Dichlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
1,4-Dichlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
t-1,4-Dichloro-2 butene	ND	N	ug/L	5	"	10/05/1998 PJG
Dichlorodifluoromethane	ND		ug/L	1	"	10/05/1998 PJG
1,1-Dichloroethane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dichloroethane	ND		ug/L	1	"	10/05/1998 PJG

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8742	Matrix:	Water / Grab
Client Sample:	SP-6-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 11:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC						
1,1-Dichloroethene	ND		ug/L	1	SW-846 Mtd. 8260B	10/05/1998 PJG
t-1,2-Dichloroethene	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dichloropropane	ND		ug/L	1	"	10/05/1998 PJG
c-1,3-Dichloropropene	ND		ug/L	1	"	10/05/1998 PJG
t-1,3-Dichloropropene	ND		ug/L	1	"	10/05/1998 PJG
Ethylbenzene	ND		ug/L	1	"	10/05/1998 PJG
Ethyl Methacrylate	ND	N	ug/L	5	"	10/05/1998 PJG
2-Hexanone	ND		ug/L	5	"	10/05/1998 PJG
Methacrylonitrile	ND	N	ug/L	5	"	10/05/1998 PJG
Methylene Bromide	ND	N	ug/L	1	"	10/05/1998 PJG
Methylene Chloride	ND		ug/L	1	"	10/05/1998 PJG
Methyl Ethyl Ketone	ND		ug/L	5	"	10/05/1998 PJG
Methyl Iodide	ND		ug/L	1	"	10/05/1998 PJG
Methyl Methacrylate	ND	N	ug/L	5	"	10/05/1998 PJG
4-Methyl-2-pentanone (MIBK)	ND		ug/L	5	"	10/05/1998 PJG
Pentachloroethane	ND	N	ug/L	5	"	10/05/1998 PJG
2-Picoline	ND	N	ug/L	5	"	10/05/1998 PJG
Propionitrile	ND	N	ug/L	5	"	10/05/1998 PJG
Styrene	ND		ug/L	1	"	10/05/1998 PJG
1,1,1,2-Tetrachloroethane	ND		ug/L	1	"	10/05/1998 PJG
1,1,2,2-Tetrachloroethane	ND		ug/L	1	"	10/05/1998 PJG
Tetrachloroethene	ND		ug/L	1	"	10/05/1998 PJG
Toluene	ND		ug/L	1	"	10/05/1998 PJG
1,1,1-Trichloroethane	ND		ug/L	1	"	10/05/1998 PJG
1,1,2-Trichloroethane	ND		ug/L	1	"	10/05/1998 PJG
Trichloroethene	ND		ug/L	1	"	10/05/1998 PJG
Trichlorofluoromethane	ND		ug/L	1	"	10/05/1998 PJG
1,2,3-Trichloropropane	ND		ug/L	1	"	10/05/1998 PJG
Vinyl Acetate	ND		ug/L	5	"	10/05/1998 PJG
Vinyl Chloride	ND		ug/L	1	"	10/05/1998 PJG
Xylene (Total)	ND		ug/L	3	"	10/05/1998 PJG

Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Dibromofluoromethane	111	%	81-117	"	10/05/1998 PJG
Toluene-d8	104	%	87-114	"	10/05/1998 PJG

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8742	Matrix:	Water / Grab
Client Sample:	SP-6-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 11:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC					
Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Bromofluorobenzene	100	%	84-108	SW-846 Mtd. 8260B	10/05/1998 PJG
GC/MS SEMIVOLATILE ORGANICS					
Acenaphthene	ND	ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
Acenaphthylene	ND	ug/L	5	"	10/01/1998 TMJ
Acetophenone	ND N	ug/L	10	"	10/01/1998 TMJ
2-Acetylaminofluorene	ND N	ug/L	10	"	10/01/1998 TMJ
Aldrin	ND N	ug/L	10	"	10/01/1998 TMJ
alpha-BHC	ND N	ug/L	10	"	10/01/1998 TMJ
4-Aminobiphenyl	ND N	ug/L	10	"	10/01/1998 TMJ
Aniline	ND	ug/L	10	"	10/01/1998 TMJ
Anthracene	ND	ug/L	5	"	10/01/1998 TMJ
Aramite	ND N	ug/L	10	"	10/01/1998 TMJ
Benzo(a)anthracene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(b)fluoranthene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(k)fluoranthene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(g,h,i)perylene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(a)pyrene	ND	ug/L	5	"	10/01/1998 TMJ
Benzyl Alcohol	ND	ug/L	20	"	10/01/1998 TMJ
beta-BHC	ND N	ug/L	40	"	10/01/1998 TMJ
Bis(2-chloroethoxy)methane	ND	ug/L	5	"	10/01/1998 TMJ
Bis(2-chloroethyl)ether	ND	ug/L	5	"	10/01/1998 TMJ
Bis(2chloro1methylethyl)ether	ND N	ug/L	10	"	10/01/1998 TMJ
Bis(2-ethylhexyl)phthalate	ND	ug/L	5	"	10/01/1998 TMJ
4-Bromophenylphenyl ether	ND	ug/L	5	"	10/01/1998 TMJ
Butyl benzyl phthalate	ND	ug/L	5	"	10/01/1998 TMJ
Chlordane	ND N	ug/L	10	"	10/01/1998 TMJ
4-Chloroaniline	ND	ug/L	20	"	10/01/1998 TMJ
Chlorobenzilate	ND N	ug/L	10	"	10/01/1998 TMJ
4-Chloro-3-methylphenol	ND	ug/L	5	"	10/01/1998 TMJ
2-Chloronaphthalene	ND	ug/L	5	"	10/01/1998 TMJ
2-Chlorophenol	ND	ug/L	5	"	10/01/1998 TMJ
4-Chlorophenylphenyl ether	ND	ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8742	Matrix:	Water / Grab
Client Sample:	SP-6-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 11:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Chrysene	ND		ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
m&p-Cresol	ND		ug/L	10	"	10/01/1998 TMJ
o-Cresol	ND		ug/L	5	"	10/01/1998 TMJ
4,4'-DDD	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDE	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDT	ND	N	ug/L	10	"	10/01/1998 TMJ
delta-BHC	ND	N	ug/L	30	"	10/01/1998 TMJ
Diallate	ND	N	ug/L	10	"	10/01/1998 TMJ
Dibenzo(a,h)anthracene	ND		ug/L	5	"	10/01/1998 TMJ
Dibenzofuran	ND		ug/L	5	"	10/01/1998 TMJ
3,3-Dichlorobenzidine	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dichlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Dieldrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Diethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Dimethoate	ND	N	ug/L	10	"	10/01/1998 TMJ
p-(Dimethylamino)azobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
7,12-Dimethylbenz(a)anthracene	ND	N	ug/L	10	"	10/01/1998 TMJ
3,3-Dimethylbenzidine	ND	N	ug/L	10	"	10/01/1998 TMJ
a,a-Dimethylphenethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2,4-Dimethylphenol	ND		ug/L	5	"	10/01/1998 TMJ
Dimethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-Butyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-octyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
m-Dinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
4,6-Dinitro-o-cresol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrophenol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
Dinoseb	ND	N	ug/L	10	"	10/01/1998 TMJ
Diphenylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Disulfoton	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan I	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan II	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan sulfate	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8742	Matrix:	Water / Grab
Client Sample:	SP-6-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 11:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Endrin	ND	N	ug/L	10	SW-846 Mtd. 8270C	10/01/1998 TMJ
Endrin aldehyde	ND	N	ug/L	10	"	10/01/1998 TMJ
Ethyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
Famphur	ND	N	ug/L	10	"	10/01/1998 TMJ
Fluoranthene	ND		ug/L	5	"	10/01/1998 TMJ
Fluorene	ND		ug/L	5	"	10/01/1998 TMJ
gamma-BHC (Lindane)	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor Epoxide	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorobutadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorocyclopentadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachloroethane	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorophene	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachloropropene	ND	N	ug/L	10	"	10/01/1998 TMJ
Indeno(123-cd)pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Isodrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Isophorone	ND		ug/L	5	"	10/01/1998 TMJ
Isosafrole	ND	N	ug/L	10	"	10/01/1998 TMJ
Kepone	ND	N	ug/L	10	"	10/01/1998 TMJ
Methapyrilene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methoxychlor	ND	N	ug/L	10	"	10/01/1998 TMJ
3-Methylcholanthrene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Methylnaphthalene	ND		ug/L	5	"	10/01/1998 TMJ
Methyl Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Naphthalene	ND		ug/L	5	"	10/01/1998 TMJ
1,4-Naphthoquinone	ND	N	ug/L	10	"	10/01/1998 TMJ
1-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
3-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
4-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
Nitrobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2-Nitrophenol	ND		ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8742	Matrix:	Water / Grab
Client Sample:	SP-6-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 11:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
4-Nitrophenol	ND		ug/L	20	SW-846 Mtd. 8270C	10/01/1998 TMJ
4-Nitroquinoline 1-oxide	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-n-Butylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodiethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodimethylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosodiphenylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosomethylethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosomorpholine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosopiperidine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-propylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosopyrrolidine	ND	N	ug/L	10	"	10/01/1998 TMJ
5-Nitro-o-toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachloronitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
Phenacetin	ND	N	ug/L	10	"	10/01/1998 TMJ
Phenanthrene	ND		ug/L	5	"	10/01/1998 TMJ
Phenol	ND		ug/L	5	"	10/01/1998 TMJ
p-Phenylenediamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Phorate	ND	N	ug/L	10	"	10/01/1998 TMJ
Pronamide	ND	N	ug/L	10	"	10/01/1998 TMJ
Pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Pyridine	ND		ug/L	10	"	10/01/1998 TMJ
Safrole	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4,5-Tetrachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
2,3,4,6-Tetrachlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Tetraethyl dithiopyrophosphate	ND	N	ug/L	10	"	10/01/1998 TMJ
Thionazin	ND	N	ug/L	10	"	10/01/1998 TMJ
o-Toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4-Trichlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2,4,5-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,4,6-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
O,O,O-TriethylPhosphorothioate	ND	N	ug/L	10	"	10/01/1998 TMJ
sym-Trinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8742	Matrix:	Water / Grab
Client Sample:	SP-6-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 11:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS					
Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Nitrobenzene-d5	74	%	13-101	SW-846 Mtd. 8270C	10/01/1998 TMJ
2-Fluorobiphenyl	64	%	1-141	"	10/01/1998 TMJ
p-Terphenyl-d14	78	%	7-160	"	10/01/1998 TMJ
Phenol-d5	20	%	9-138	"	10/01/1998 TMJ
2-Fluorophenol	25	%	1-131	"	10/01/1998 TMJ
2,4,6-Tribromophenol	75	%	15-141	"	10/01/1998 TMJ
ORGANIC PREPS					
Semi Volatile Extraction	-	-	-	SW-846 Mtd. 3510C	09/29/1998 FM

ND = Non Detectable

Project Manager

Jason A. Asher

Reported : 11/12/1998

Sample:	84492-8743	Matrix:	Water	/ Grab
Client Sample:	SP-ANCHO-98	Location:	White Rock Canyon	
COLLECTED:	09/23/1998 12:30	Project:	9.98-WRC Springs (HRMB)	
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY	

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
TOTAL METALS ANALYSIS					
Aluminum (ICAP)	0.2 B	mg/L	0.1	SW-846 Mtd. 6010B	09/30/1998 JC
Antimony (ICAP)	0.01	mg/L	0.01	"	09/30/1998 JC
Arsenic (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Barium (ICAP)	0.031	mg/L	0.005	"	09/30/1998 JC
Beryllium (ICAP)	ND	mg/L	0.001	"	10/01/1998 JC
Cadmium (ICAP)	ND	mg/L	0.001	"	10/01/1998 JC
Calcium (ICAP)	11	mg/L	0.2	"	09/30/1998 JC
Chromium, Total (ICAP)	ND	mg/L	0.05	"	09/30/1998 JC
Cobalt (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Copper (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
Iron (ICAP)	ND	mg/L	0.1	"	09/30/1998 JC
Lead (ICAP)	ND	mg/L	0.005	"	10/01/1998 JC
Magnesium (ICAP)	2.6	mg/L	0.03	"	09/30/1998 JC
Manganese (ICAP)	ND	mg/L	0.003	"	10/01/1998 JC
Mercury (Cold Vapor)	ND	mg/L	0.0002	SW-846 Mtd. 7470A	10/02/1998 SMM
Nickel (ICAP)	ND	mg/L	0.005	SW-846 Mtd. 6010B	09/30/1998 JC
Potassium (Flame)	1.6	mg/L	0.5	SW-846 Mtd. 7610	09/30/1998 SMM
Selenium (ICAP)	ND	mg/L	0.02	SW-846 Mtd. 6010B	09/30/1998 JC
Silver (ICAP)	ND	mg/L	0.0005	"	09/30/1998 JC
Sodium (ICAP)	10	mg/L	0.5	"	09/30/1998 JC
Thallium (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
Vanadium (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Zinc (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
GENERAL CHEMISTRY					
Alkalinity, Bicarbonate	63	mg/L	10	Standard Mtd. 2320 B	10/05/1998 LS
Alkalinity, Carbonate	ND	mg/L	10	"	10/05/1998 LS
Alkalinity, Total	63	mg/L	10	"	10/05/1998 LS
Ammonia-Nitrogen	ND	mg/L	0.06	EPA 350.1	10/01/1998 KA
Cyanide, Total	ND	mg/L	0.005	SW-846 Mtd. 9010 A	10/02/1998 LS
Kjeldahl-Nitrogen	0.2	mg/L	0.1	EPA 351.2	10/02/1998 LS
Total Organic Carbon (TOC)	ND	mg/L	1	EPA 415.1	11/12/1998 JL
Total Phosphorus	0.015	mg/L	0.004	EPA 365.1	09/30/1998 KA

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8743	Matrix:	Water / Grab
Client Sample:	SP-ANCHO-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 12:30	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
PHYSICAL PROPERTY ANALYSIS						
Solids, Dissolved	70		mg/L	10	Standard Method 2540C	09/29/1998 JL
Solids, Suspended	5		mg/L	1	EPA 160.2	09/29/1998 JL
INORGANIC PREPS						
Cold Vapor Preparation	-		-	-	SW-846 Mtd. 7470A	10/02/1998 SMM
ICP Digestion	-		-	-	SW-846 Mtd. 3010A	09/29/1998 BLM
ICP/GFAA Digestion (Antimony)	-		-	-	SW-846 Mtd. 3005A	09/29/1998 BLM
ICP/GFAA Digestion (Silver)	-		-	-	SW-846 Mtd. 7760A	09/29/1998 BLM
GC/MS VOLATILE ORGANIC						
Acetone	ND		ug/L	5	SW-846 Mtd. 8260B	10/05/1998 PJG
Acrolein	ND		ug/L	5	"	10/05/1998 PJG
Acrylonitrile	ND		ug/L	5	"	10/05/1998 PJG
Allyl Chloride	ND		ug/L	1	"	10/05/1998 PJG
Benzene	ND		ug/L	1	"	10/05/1998 PJG
Bromodichloromethane	ND		ug/L	1	"	10/05/1998 PJG
Bromoform	ND		ug/L	1	"	10/05/1998 PJG
Bromomethane	ND		ug/L	1	"	10/05/1998 PJG
Carbon Disulfide	ND		ug/L	1	"	10/05/1998 PJG
Carbon Tetrachloride	ND		ug/L	1	"	10/05/1998 PJG
Chlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
Chloroethane	ND		ug/L	1	"	10/05/1998 PJG
Chloroform	ND		ug/L	1	"	10/05/1998 PJG
Chloromethane	ND		ug/L	1	"	10/05/1998 PJG
Chloroprene	ND	N	ug/L	5	"	10/05/1998 PJG
Dibromochloromethane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dibromo-3-Chloropropane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dibromoethane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dichlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
1,3-Dichlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
1,4-Dichlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
t-1,4-Dichloro-2 butene	ND	N	ug/L	5	"	10/05/1998 PJG
Dichlorodifluoromethane	ND		ug/L	1	"	10/05/1998 PJG
1,1-Dichloroethane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dichloroethane	ND		ug/L	1	"	10/05/1998 PJG

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8743	Matrix:	Water / Grab
Client Sample:	SP-ANCHO-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 12:30	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC						
1,1-Dichloroethene	ND		ug/L	1	SW-846 Mtd. 8260B	10/05/1998 PJG
t-1,2-Dichloroethene	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dichloropropane	ND		ug/L	1	"	10/05/1998 PJG
c-1,3-Dichloropropene	ND		ug/L	1	"	10/05/1998 PJG
t-1,3-Dichloropropene	ND		ug/L	1	"	10/05/1998 PJG
Ethylbenzene	ND		ug/L	1	"	10/05/1998 PJG
Ethyl Methacrylate	ND	N	ug/L	5	"	10/05/1998 PJG
2-Hexanone	ND		ug/L	5	"	10/05/1998 PJG
Methacrylonitrile	ND	N	ug/L	5	"	10/05/1998 PJG
Methylene Bromide	ND	N	ug/L	1	"	10/05/1998 PJG
Methylene Chloride	ND		ug/L	1	"	10/05/1998 PJG
Methyl Ethyl Ketone	ND	N	ug/L	5	"	10/05/1998 PJG
Methyl Iodide	ND		ug/L	1	"	10/05/1998 PJG
Methyl Methacrylate	ND	N	ug/L	5	"	10/05/1998 PJG
4-Methyl-2-pentanone (MIBK)	ND		ug/L	5	"	10/05/1998 PJG
Pentachloroethane	ND	N	ug/L	5	"	10/05/1998 PJG
2-Picoline	ND	N	ug/L	5	"	10/05/1998 PJG
Propionitrile	ND	N	ug/L	5	"	10/05/1998 PJG
Styrene	ND		ug/L	1	"	10/05/1998 PJG
1,1,1,2-Tetrachloroethane	ND		ug/L	1	"	10/05/1998 PJG
1,1,2,2-Tetrachloroethane	ND		ug/L	1	"	10/05/1998 PJG
Tetrachloroethene	ND		ug/L	1	"	10/05/1998 PJG
Toluene	ND		ug/L	1	"	10/05/1998 PJG
1,1,1-Trichloroethane	ND		ug/L	1	"	10/05/1998 PJG
1,1,2-Trichloroethane	ND		ug/L	1	"	10/05/1998 PJG
Trichloroethene	ND		ug/L	1	"	10/05/1998 PJG
Trichlorofluoromethane	ND		ug/L	1	"	10/05/1998 PJG
1,2,3-Trichloropropane	ND		ug/L	1	"	10/05/1998 PJG
Vinyl Acetate	ND		ug/L	5	"	10/05/1998 PJG
Vinyl Chloride	ND		ug/L	1	"	10/05/1998 PJG
Xylene (Total)	ND		ug/L	3	"	10/05/1998 PJG

Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Dibromofluoromethane	111	%	81-117	"	10/05/1998 PJG
Toluene-d8	108	%	87-114	"	10/05/1998 PJG

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8743	Matrix:	Water / Grab
Client Sample:	SP-ANCHO-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 12:30	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC					
Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Bromofluorobenzene	98	%	84-108	SW-846 Mtd. 8260B	10/05/1998 PJG
GC/MS SEMIVOLATILE ORGANICS					
Acenaphthene	ND	ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
Acenaphthylene	ND	ug/L	5	"	10/01/1998 TMJ
Acetophenone	ND N	ug/L	10	"	10/01/1998 TMJ
2-Acetylaminofluorene	ND N	ug/L	10	"	10/01/1998 TMJ
Aldrin	ND N	ug/L	10	"	10/01/1998 TMJ
alpha-BHC	ND N	ug/L	10	"	10/01/1998 TMJ
4-Aminobiphenyl	ND N	ug/L	10	"	10/01/1998 TMJ
Aniline	ND	ug/L	10	"	10/01/1998 TMJ
Anthracene	ND	ug/L	5	"	10/01/1998 TMJ
Aramite	ND N	ug/L	10	"	10/01/1998 TMJ
Benzo(a)anthracene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(b)fluoranthene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(k)fluoranthene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(g,h,i)perylene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(a)pyrene	ND	ug/L	5	"	10/01/1998 TMJ
Benzyl Alcohol	ND	ug/L	20	"	10/01/1998 TMJ
beta-BHC	ND N	ug/L	40	"	10/01/1998 TMJ
Bis(2-chloroethoxy)methane	ND	ug/L	5	"	10/01/1998 TMJ
Bis(2-chloroethyl)ether	ND	ug/L	5	"	10/01/1998 TMJ
Bis(2chloro1methylethyl)ether	ND N	ug/L	10	"	10/01/1998 TMJ
Bis(2-ethylhexyl)phthalate	ND	ug/L	5	"	10/01/1998 TMJ
4-Bromophenylphenyl ether	ND	ug/L	5	"	10/01/1998 TMJ
Butyl benzyl phthalate	ND	ug/L	5	"	10/01/1998 TMJ
Chlordane	ND N	ug/L	10	"	10/01/1998 TMJ
4-Chloroaniline	ND	ug/L	20	"	10/01/1998 TMJ
Chlorobenzilate	ND N	ug/L	10	"	10/01/1998 TMJ
4-Chloro-3-methylphenol	ND	ug/L	5	"	10/01/1998 TMJ
2-Chloronaphthalene	ND	ug/L	5	"	10/01/1998 TMJ
2-Chlorophenol	ND	ug/L	5	"	10/01/1998 TMJ
4-Chlorophenylphenyl ether	ND	ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8743	Matrix:	Water / Grab
Client Sample:	SP-ANCHO-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 12:30	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Chrysene	ND		ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
m&p-Cresol	ND		ug/L	10	"	10/01/1998 TMJ
o-Cresol	ND		ug/L	5	"	10/01/1998 TMJ
4,4'-DDD	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDE	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDT	ND	N	ug/L	10	"	10/01/1998 TMJ
delta-BHC	ND	N	ug/L	30	"	10/01/1998 TMJ
Diallate	ND	N	ug/L	10	"	10/01/1998 TMJ
Dibenzo(a,h)anthracene	ND		ug/L	5	"	10/01/1998 TMJ
Dibenzofuran	ND		ug/L	5	"	10/01/1998 TMJ
3,3-Dichlorobenzidine	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dichlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Dieldrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Diethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Dimethoate	ND	N	ug/L	10	"	10/01/1998 TMJ
p-(Dimethylamino)azobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
7,12-Dimethylbenz(a)anthracene	ND	N	ug/L	10	"	10/01/1998 TMJ
3,3-Dimethylbenzidine	ND	N	ug/L	10	"	10/01/1998 TMJ
a,a-Dimethylphenethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2,4-Dimethylphenol	ND		ug/L	5	"	10/01/1998 TMJ
Dimethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-Butyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-octyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
m-Dinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
4,6-Dinitro-o-cresol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrophenol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
Dinoseb	ND	N	ug/L	10	"	10/01/1998 TMJ
Diphenylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Disulfoton	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan I	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan II	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan sulfate	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8743	Matrix:	Water / Grab
Client Sample:	SP-ANCHO-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 12:30	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Endrin	ND	N	ug/L	10	SW-846 Mtd. 8270C	10/01/1998 TMJ
Endrin aldehyde	ND	N	ug/L	10	"	10/01/1998 TMJ
Ethyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
Famphur	ND	N	ug/L	10	"	10/01/1998 TMJ
Fluoranthene	ND		ug/L	5	"	10/01/1998 TMJ
Fluorene	ND		ug/L	5	"	10/01/1998 TMJ
gamma-BHC (Lindane)	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor Epoxide	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorobutadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorocyclopentadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachloroethane	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorophene	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachloropropene	ND	N	ug/L	10	"	10/01/1998 TMJ
Indeno(123-cd)pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Isodrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Isophorone	ND		ug/L	5	"	10/01/1998 TMJ
Isosafrole	ND	N	ug/L	10	"	10/01/1998 TMJ
Kepone	ND	N	ug/L	10	"	10/01/1998 TMJ
Methapyrilene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methoxychlor	ND	N	ug/L	10	"	10/01/1998 TMJ
3-Methylcholanthrene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Methylnaphthalene	ND		ug/L	5	"	10/01/1998 TMJ
Methyl Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Naphthalene	ND		ug/L	5	"	10/01/1998 TMJ
1,4-Naphthoquinone	ND	N	ug/L	10	"	10/01/1998 TMJ
1-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
3-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
4-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
Nitrobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2-Nitrophenol	ND		ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8743	Matrix:	Water / Grab
Client Sample:	SP-ANCHO-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 12:30	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
4-Nitrophenol	ND		ug/L	20	SW-846 Mtd. 8270C	10/01/1998 TMJ
4-Nitroquinoline 1-oxide	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-n-Butylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodiethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodimethylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosodiphenylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosomethylethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosomorpholine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosopiperidine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-propylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosopyrrolidine	ND	N	ug/L	10	"	10/01/1998 TMJ
5-Nitro-o-toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachloronitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
Phenacetin	ND	N	ug/L	10	"	10/01/1998 TMJ
Phenanthrene	ND		ug/L	5	"	10/01/1998 TMJ
Phenol	ND		ug/L	5	"	10/01/1998 TMJ
p-Phenylenediamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Phorate	ND	N	ug/L	10	"	10/01/1998 TMJ
Pronamide	ND	N	ug/L	10	"	10/01/1998 TMJ
Pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Pyridine	ND		ug/L	10	"	10/01/1998 TMJ
Safrole	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4,5-Tetrachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
2,3,4,6-Tetrachlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Tetraethyl dithiopyrophosphate	ND	N	ug/L	10	"	10/01/1998 TMJ
Thionazin	ND	N	ug/L	10	"	10/01/1998 TMJ
o-Toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4-Trichlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2,4,5-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,4,6-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
O,O,O-TriethylPhosphorothioate	ND	N	ug/L	10	"	10/01/1998 TMJ
sym-Trinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8743	Matrix:	Water / Grab
Client Sample:	SP-ANCHO-98	Location:	White Rock Canyon
COLLECTED:	09/23/1998 12:30	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst

GC/MS SEMIVOLATILE ORGANICS

Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Nitrobenzene-d5	66	%	13-101	SW-846 Mtd. 8270C	10/01/1998 TMJ
2-Fluorobiphenyl	60	%	1-141	"	10/01/1998 TMJ
p-Terphenyl-d14	67	%	7-160	"	10/01/1998 TMJ
Phenol-d5	28	%	9-138	"	10/01/1998 TMJ
2-Fluorophenol	37	%	1-131	"	10/01/1998 TMJ
2,4,6-Tribromophenol	78	%	15-141	"	10/01/1998 TMJ

ORGANIC PREPS

Semi Volatile Extraction	-	-	-	SW-846 Mtd. 3510C	09/29/1998 FM

ND = Non Detectable

Project Manager

Jason A. Asher

Reported : 11/12/1998

Sample:	84492-8746	Matrix:	Water / Composite
Client Sample:	Rinsate 9-98	Location:	White Rock DOE-OB/Sante Fe HRB
COLLECTED:	09/21/1998 19:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
TOTAL METALS ANALYSIS					
Aluminum (ICAP)	0.2 B	mg/L	0.1	SW-846 Mtd. 6010B	09/30/1998 JC
Antimony (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Arsenic (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Barium (ICAP)	ND	mg/L	0.005	"	09/30/1998 JC
Beryllium (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Cadmium (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Calcium (ICAP)	ND	mg/L	0.2	"	09/30/1998 JC
Chromium, Total (ICAP)	ND	mg/L	0.05	"	09/30/1998 JC
Cobalt (ICAP)	ND	mg/L	0.001	"	09/30/1998 JC
Copper (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
Iron (ICAP)	ND	mg/L	0.1	"	09/30/1998 JC
Lead (ICAP)	ND	mg/L	0.005	"	09/30/1998 JC
Magnesium (ICAP)	ND	mg/L	0.03	"	09/30/1998 JC
Manganese (ICAP)	ND	mg/L	0.003	"	09/30/1998 JC
Mercury (Cold Vapor)	ND	mg/L	0.0002	SW-846 Mtd. 7470A	10/02/1998 SMM
Nickel (ICAP)	ND	mg/L	0.005	SW-846 Mtd. 6010B	09/30/1998 JC
Potassium (Flame)	ND	mg/L	0.5	SW-846 Mtd. 7610	09/30/1998 SMM
Selenium (ICAP)	ND	mg/L	0.02	SW-846 Mtd. 6010B	09/30/1998 JC
Silver (ICAP)	ND	mg/L	0.0005	"	09/30/1998 JC
Sodium (ICAP)	1.0 B	mg/L	0.5	"	09/30/1998 JC
Thallium (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
Vanadium (ICAP)	ND	mg/L	0.01	"	09/30/1998 JC
Zinc (ICAP)	ND	mg/L	0.02	"	09/30/1998 JC
GENERAL CHEMISTRY					
Alkalinity, Bicarbonate	ND	mg/L	10	Standard Mtd. 2320 B	10/05/1998 LS
Alkalinity, Carbonate	ND	mg/L	10	"	10/05/1998 LS
Alkalinity, Total	ND	mg/L	10	"	10/05/1998 LS
Ammonia-Nitrogen	0.10	mg/L	0.06	EPA 350.1	10/01/1998 KA
Cyanide, Total	ND	mg/L	0.005	SW-846 Mtd. 9010 A	10/02/1998 LS
Kjeldahl-Nitrogen	0.4	mg/L	0.1	EPA 351.2	10/02/1998 LS
Total Organic Carbon (TOC)	ND	mg/L	1	EPA 415.1	11/12/1998 JL
Total Phosphorus	ND	mg/L	0.004	EPA 365.1	09/30/1998 KA

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8746	Matrix:	Water / Composite
Client Sample:	Rinsate 9-98	Location:	White Rock DOE-OB/Sante Fe HRB
COLLECTED:	09/21/1998 19:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
PHYSICAL PROPERTY ANALYSIS						
Solids, Dissolved	ND		mg/L	10	Standard Method 2540C	09/29/1998 JL
Solids, Suspended	ND		mg/L	1	EPA 160.2	09/29/1998 JL
INORGANIC PREPS						
Cold Vapor Preparation	-		-	-	SW-846 Mtd. 7470A	10/02/1998 SMM
ICP Digestion	-		-	-	SW-846 Mtd. 3010A	09/29/1998 BLM
ICP/GFAA Digestion (Antimony)	-		-	-	SW-846 Mtd. 3005A	09/29/1998 BLM
ICP/GFAA Digestion (Silver)	-		-	-	SW-846 Mtd. 7760A	09/29/1998 BLM
GC/MS VOLATILE ORGANIC						
Acetone	7		ug/L	5	SW-846 Mtd. 8260B	10/05/1998 PJG
Acrolein	ND		ug/L	5	"	10/05/1998 PJG
Acrylonitrile	ND		ug/L	5	"	10/05/1998 PJG
Allyl Chloride	ND		ug/L	1	"	10/05/1998 PJG
Benzene	ND		ug/L	1	"	10/05/1998 PJG
Bromodichloromethane	ND		ug/L	1	"	10/05/1998 PJG
Bromoform	ND		ug/L	1	"	10/05/1998 PJG
Bromomethane	ND		ug/L	1	"	10/05/1998 PJG
Carbon Disulfide	ND		ug/L	1	"	10/05/1998 PJG
Carbon Tetrachloride	ND		ug/L	1	"	10/05/1998 PJG
Chlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
Chloroethane	ND		ug/L	1	"	10/05/1998 PJG
Chloroform	2		ug/L	1	"	10/05/1998 PJG
Chloromethane	ND		ug/L	1	"	10/05/1998 PJG
Chloroprene	ND	N	ug/L	5	"	10/05/1998 PJG
Dibromochloromethane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dibromo-3-Chloropropane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dibromoethane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dichlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
1,3-Dichlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
1,4-Dichlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
t-1,4-Dichloro-2 butene	ND	N	ug/L	5	"	10/05/1998 PJG
Dichlorodifluoromethane	ND		ug/L	1	"	10/05/1998 PJG
1,1-Dichloroethane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dichloroethane	ND		ug/L	1	"	10/05/1998 PJG

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8746	Matrix:	Water / Composite
Client Sample:	Rinsate 9-98	Location:	White Rock DOE-OB/Sante Fe HRB
COLLECTED:	09/21/1998 19:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC						
1,1-Dichloroethene	ND		ug/L	1	SW-846 Mtd. 8260B	10/05/1998 PJG
t-1,2-Dichloroethene	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dichloropropane	ND		ug/L	1	"	10/05/1998 PJG
c-1,3-Dichloropropene	ND		ug/L	1	"	10/05/1998 PJG
t-1,3-Dichloropropene	ND		ug/L	1	"	10/05/1998 PJG
Ethylbenzene	ND		ug/L	1	"	10/05/1998 PJG
Ethyl Methacrylate	ND	N	ug/L	5	"	10/05/1998 PJG
2-Hexanone	ND		ug/L	5	"	10/05/1998 PJG
Methacrylonitrile	ND	N	ug/L	5	"	10/05/1998 PJG
Methylene Bromide	ND	N	ug/L	1	"	10/05/1998 PJG
Methylene Chloride	ND		ug/L	1	"	10/05/1998 PJG
Methyl Ethyl Ketone	ND		ug/L	5	"	10/05/1998 PJG
Methyl Iodide	ND		ug/L	1	"	10/05/1998 PJG
Methyl Methacrylate	ND	N	ug/L	5	"	10/05/1998 PJG
4-Methyl-2-pentanone (MIBK)	ND		ug/L	5	"	10/05/1998 PJG
Pentachloroethane	ND	N	ug/L	5	"	10/05/1998 PJG
2-Picoline	ND	N	ug/L	5	"	10/05/1998 PJG
Propionitrile	ND	N	ug/L	5	"	10/05/1998 PJG
Styrene	ND		ug/L	1	"	10/05/1998 PJG
1,1,1,2-Tetrachloroethane	ND		ug/L	1	"	10/05/1998 PJG
1,1,2,2-Tetrachloroethane	ND		ug/L	1	"	10/05/1998 PJG
Tetrachloroethene	ND		ug/L	1	"	10/05/1998 PJG
Toluene	ND		ug/L	1	"	10/05/1998 PJG
1,1,1-Trichloroethane	ND		ug/L	1	"	10/05/1998 PJG
1,1,2-Trichloroethane	ND		ug/L	1	"	10/05/1998 PJG
Trichloroethene	ND		ug/L	1	"	10/05/1998 PJG
Trichlorofluoromethane	ND		ug/L	1	"	10/05/1998 PJG
1,2,3-Trichloropropane	ND		ug/L	1	"	10/05/1998 PJG
Vinyl Acetate	ND		ug/L	5	"	10/05/1998 PJG
Vinyl Chloride	ND		ug/L	1	"	10/05/1998 PJG
Xylene (Total)	ND		ug/L	3	"	10/05/1998 PJG

Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Dibromofluoromethane	115	%	81-117	"	10/05/1998 PJG
Toluene-d8	108	%	87-114	"	10/05/1998 PJG

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8746	Matrix:	Water / Composite
Client Sample:	Rinsate 9-98	Location:	White Rock DOE-OB/Sante Fe HRB
COLLECTED:	09/21/1998 19:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC					
Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Bromofluorobenzene	101	%	84-108	SW-846 Mtd. 8260B	10/05/1998 PJG
GC/MS SEMIVOLATILE ORGANICS					
Acenaphthene	ND	ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
Acenaphthylene	ND	ug/L	5	"	10/01/1998 TMJ
Acetophenone	ND N	ug/L	10	"	10/01/1998 TMJ
2-Acetylaminofluorene	ND N	ug/L	10	"	10/01/1998 TMJ
Aldrin	ND N	ug/L	10	"	10/01/1998 TMJ
alpha-BHC	ND N	ug/L	10	"	10/01/1998 TMJ
4-Aminobiphenyl	ND N	ug/L	10	"	10/01/1998 TMJ
Aniline	ND	ug/L	10	"	10/01/1998 TMJ
Anthracene	ND	ug/L	5	"	10/01/1998 TMJ
Aramite	ND N	ug/L	10	"	10/01/1998 TMJ
Benzo(a)anthracene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(b)fluoranthene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(k)fluoranthene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(g,h,i)perylene	ND	ug/L	5	"	10/01/1998 TMJ
Benzo(a)pyrene	ND	ug/L	5	"	10/01/1998 TMJ
Benzyl Alcohol	ND	ug/L	20	"	10/01/1998 TMJ
beta-BHC	ND N	ug/L	40	"	10/01/1998 TMJ
Bis(2-chloroethoxy)methane	ND	ug/L	5	"	10/01/1998 TMJ
Bis(2-chloroethyl)ether	ND	ug/L	5	"	10/01/1998 TMJ
Bis(2chloro1methylethyl)ether	ND N	ug/L	10	"	10/01/1998 TMJ
Bis(2-ethylhexyl)phthalate	ND	ug/L	5	"	10/01/1998 TMJ
4-Bromophenylphenyl ether	ND	ug/L	5	"	10/01/1998 TMJ
Butyl benzyl phthalate	ND	ug/L	5	"	10/01/1998 TMJ
Chlordane	ND N	ug/L	10	"	10/01/1998 TMJ
4-Chloroaniline	ND	ug/L	20	"	10/01/1998 TMJ
Chlorobenzilate	ND N	ug/L	10	"	10/01/1998 TMJ
4-Chloro-3-methylphenol	ND	ug/L	5	"	10/01/1998 TMJ
2-Chloronaphthalene	ND	ug/L	5	"	10/01/1998 TMJ
2-Chlorophenol	ND	ug/L	5	"	10/01/1998 TMJ
4-Chlorophenylphenyl ether	ND	ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8746	Matrix:	Water / Composite
Client Sample:	Rinsate 9-98	Location:	White Rock DOE-OB/Sante Fe HRB
COLLECTED:	09/21/1998 19:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Chrysene	ND		ug/L	5	SW-846 Mtd. 8270C	10/01/1998 TMJ
m&p-Cresol	ND		ug/L	10	"	10/01/1998 TMJ
o-Cresol	ND		ug/L	5	"	10/01/1998 TMJ
4,4'-DDD	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDE	ND	N	ug/L	10	"	10/01/1998 TMJ
4,4'-DDT	ND	N	ug/L	10	"	10/01/1998 TMJ
delta-BHC	ND	N	ug/L	30	"	10/01/1998 TMJ
Diallate	ND	N	ug/L	10	"	10/01/1998 TMJ
Dibenzo(a,h)anthracene	ND		ug/L	5	"	10/01/1998 TMJ
Dibenzofuran	ND		ug/L	5	"	10/01/1998 TMJ
3,3-Dichlorobenzidine	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dichlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Dieldrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Diethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Dimethoate	ND	N	ug/L	10	"	10/01/1998 TMJ
p-(Dimethylamino)azobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
7,12-Dimethylbenz(a)anthracene	ND	N	ug/L	10	"	10/01/1998 TMJ
3,3-Dimethylbenzidine	ND	N	ug/L	10	"	10/01/1998 TMJ
a,a-Dimethylphenethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2,4-Dimethylphenol	ND		ug/L	5	"	10/01/1998 TMJ
Dimethyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-Butyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
Di-n-octyl Phthalate	ND		ug/L	5	"	10/01/1998 TMJ
m-Dinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
4,6-Dinitro-o-cresol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrophenol	ND		ug/L	20	"	10/01/1998 TMJ
2,4-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
2,6-Dinitrotoluene	ND		ug/L	5	"	10/01/1998 TMJ
Dinoseb	ND	N	ug/L	10	"	10/01/1998 TMJ
Diphenylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Disulfoton	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan I	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan II	ND	N	ug/L	10	"	10/01/1998 TMJ
Endosulfan sulfate	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8746	Matrix:	Water / Composite
Client Sample:	Rinsate 9-98	Location:	White Rock DOE-OB/Sante Fe HRB
COLLECTED:	09/21/1998 19:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
Endrin	ND	N	ug/L	10	SW-846 Mtd. 8270C	10/01/1998 TMJ
Endrin aldehyde	ND	N	ug/L	10	"	10/01/1998 TMJ
Ethyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
Famphur	ND	N	ug/L	10	"	10/01/1998 TMJ
Fluoranthene	ND		ug/L	5	"	10/01/1998 TMJ
Fluorene	ND		ug/L	5	"	10/01/1998 TMJ
gamma-BHC (Lindane)	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor	ND	N	ug/L	10	"	10/01/1998 TMJ
Heptachlor Epoxide	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorobutadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorocyclopentadiene	ND		ug/L	5	"	10/01/1998 TMJ
Hexachloroethane	ND		ug/L	5	"	10/01/1998 TMJ
Hexachlorophene	ND	N	ug/L	10	"	10/01/1998 TMJ
Hexachloropropene	ND	N	ug/L	10	"	10/01/1998 TMJ
Indeno(123-cd)pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Isodrin	ND	N	ug/L	10	"	10/01/1998 TMJ
Isophorone	ND		ug/L	5	"	10/01/1998 TMJ
Isosafrole	ND	N	ug/L	10	"	10/01/1998 TMJ
Kepone	ND	N	ug/L	10	"	10/01/1998 TMJ
Methapyrilene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methoxychlor	ND	N	ug/L	10	"	10/01/1998 TMJ
3-Methylcholanthrene	ND	N	ug/L	10	"	10/01/1998 TMJ
Methyl methanesulfonate	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Methylnaphthalene	ND		ug/L	5	"	10/01/1998 TMJ
Methyl Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Naphthalene	ND		ug/L	5	"	10/01/1998 TMJ
1,4-Naphthoquinone	ND	N	ug/L	10	"	10/01/1998 TMJ
1-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Naphthylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
2-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
3-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
4-Nitroaniline	ND		ug/L	20	"	10/01/1998 TMJ
Nitrobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2-Nitrophenol	ND		ug/L	5	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8746	Matrix:	Water / Composite
Client Sample:	Rinsate 9-98	Location:	White Rock DOE-OB/Sante Fe HRB
COLLECTED:	09/21/1998 19:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS						
4-Nitrophenol	ND		ug/L	20	SW-846 Mtd. 8270C	10/01/1998 TMJ
4-Nitroquinoline 1-oxide	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-n-Butylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodiethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodimethylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosodiphenylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosomethylethylamine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosomorpholine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosopiperidine	ND	N	ug/L	10	"	10/01/1998 TMJ
N-Nitrosodi-propylamine	ND		ug/L	5	"	10/01/1998 TMJ
N-Nitrosopyrrolidine	ND	N	ug/L	10	"	10/01/1998 TMJ
5-Nitro-o-toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
Parathion	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachloronitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
Pentachlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
Phenacetin	ND	N	ug/L	10	"	10/01/1998 TMJ
Phenanthrene	ND		ug/L	5	"	10/01/1998 TMJ
Phenol	ND		ug/L	5	"	10/01/1998 TMJ
p-Phenylenediamine	ND	N	ug/L	10	"	10/01/1998 TMJ
Phorate	ND	N	ug/L	10	"	10/01/1998 TMJ
Pronamide	ND	N	ug/L	10	"	10/01/1998 TMJ
Pyrene	ND		ug/L	5	"	10/01/1998 TMJ
Pyridine	ND		ug/L	10	"	10/01/1998 TMJ
Safrole	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4,5-Tetrachlorobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ
2,3,4,6-Tetrachlorophenol	ND	N	ug/L	10	"	10/01/1998 TMJ
Tetraethyl dithiopyrophosphate	ND	N	ug/L	10	"	10/01/1998 TMJ
Thionazin	ND	N	ug/L	10	"	10/01/1998 TMJ
o-Toluidine	ND	N	ug/L	10	"	10/01/1998 TMJ
1,2,4-Trichlorobenzene	ND		ug/L	5	"	10/01/1998 TMJ
2,4,5-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
2,4,6-Trichlorophenol	ND		ug/L	5	"	10/01/1998 TMJ
O,O,O-TriethylPhosphorothioate	ND	N	ug/L	10	"	10/01/1998 TMJ
sym-Trinitrobenzene	ND	N	ug/L	10	"	10/01/1998 TMJ

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8746	Matrix:	Water / Composite
Client Sample:	Rinsate 9-98	Location:	White Rock DOE-OB/Sante Fe HRB
COLLECTED:	09/21/1998 19:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	JRY

Test Description	Result	Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS SEMIVOLATILE ORGANICS					
Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Nitrobenzene-d5	77	%	13-101	SW-846 Mtd. 8270C	10/01/1998 TMJ
2-Fluorobiphenyl	69	%	1-141	"	10/01/1998 TMJ
p-Terphenyl-d14	80	%	7-160	"	10/01/1998 TMJ
Phenol-d5	33	%	9-138	"	10/01/1998 TMJ
2-Fluorophenol	43	%	1-131	"	10/01/1998 TMJ
2,4,6-Tribromophenol	88	%	15-141	"	10/01/1998 TMJ
ORGANIC PREPS					
Semi Volatile Extraction	-	-	-	SW-846 Mtd. 3510C	09/29/1998 FM

ND = Non Detectable

Project Manager

Jason A. Asher

Reported : 11/12/1998

Sample:	84492-8747	Matrix:	Water
Client Sample:	Trip Blank	Location:	
COLLECTED:	09/10/1998 19:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	Lab

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC						
Acetone	ND		ug/L	5	SW-846 Mtd. 8260B	10/05/1998 PJG
Acrolein	ND		ug/L	5	"	10/05/1998 PJG
Acrylonitrile	ND		ug/L	5	"	10/05/1998 PJG
Allyl Chloride	ND		ug/L	1	"	10/05/1998 PJG
Benzene	ND		ug/L	1	"	10/05/1998 PJG
Bromodichloromethane	ND		ug/L	1	"	10/05/1998 PJG
Bromoform	ND		ug/L	1	"	10/05/1998 PJG
Bromomethane	ND		ug/L	1	"	10/05/1998 PJG
Carbon Disulfide	ND		ug/L	1	"	10/05/1998 PJG
Carbon Tetrachloride	ND		ug/L	1	"	10/05/1998 PJG
Chlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
Chloroethane	ND		ug/L	1	"	10/05/1998 PJG
Chloroform	ND		ug/L	1	"	10/05/1998 PJG
Chloromethane	ND		ug/L	1	"	10/05/1998 PJG
Chloroprene	ND	N	ug/L	5	"	10/05/1998 PJG
Dibromochloromethane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dibromo-3-Chloropropane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dibromoethane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dichlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
1,3-Dichlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
1,4-Dichlorobenzene	ND		ug/L	1	"	10/05/1998 PJG
t-1,4-Dichloro-2 butene	ND	N	ug/L	5	"	10/05/1998 PJG
Dichlorodifluoromethane	ND		ug/L	1	"	10/05/1998 PJG
1,1-Dichloroethane	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dichloroethane	ND		ug/L	1	"	10/05/1998 PJG
1,1-Dichloroethene	ND		ug/L	1	"	10/05/1998 PJG
t-1,2-Dichloroethene	ND		ug/L	1	"	10/05/1998 PJG
1,2-Dichloropropane	ND		ug/L	1	"	10/05/1998 PJG
c-1,3-Dichloropropene	ND		ug/L	1	"	10/05/1998 PJG
t-1,3-Dichloropropene	ND		ug/L	1	"	10/05/1998 PJG
Ethylbenzene	ND		ug/L	1	"	10/05/1998 PJG
Ethyl Methacrylate	ND	N	ug/L	5	"	10/05/1998 PJG
2-Hexanone	ND		ug/L	5	"	10/05/1998 PJG
Methacrylonitrile	ND	N	ug/L	5	"	10/05/1998 PJG
Methylene Bromide	ND	N	ug/L	1	"	10/05/1998 PJG

ND = Non Detectable

Reported : 11/12/1998

Sample:	84492-8747	Matrix:	Water
Client Sample:	Trip Blank	Location:	
COLLECTED:	09/10/1998 19:00	Project:	9.98-WRC Springs (HRMB)
RECEIVED:	09/28/1998 11:00	Sampled By:	Lab

Test Description	Result		Unit	Reporting Detection Limit	Method	Date/Analyst
GC/MS VOLATILE ORGANIC						
Methylene Chloride	ND		ug/L	1	SW-846 Mtd. 8260B	10/05/1998 PJG
Methyl Ethyl Ketone	ND		ug/L	5	"	10/05/1998 PJG
Methyl Iodide	ND		ug/L	1	"	10/05/1998 PJG
Methyl Methacrylate	ND	N	ug/L	5	"	10/05/1998 PJG
4-Methyl-2-pentanone (MIBK)	ND		ug/L	5	"	10/05/1998 PJG
Pentachloroethane	ND	N	ug/L	5	"	10/05/1998 PJG
2-Picoline	ND	N	ug/L	5	"	10/05/1998 PJG
Propionitrile	ND	N	ug/L	5	"	10/05/1998 PJG
Styrene	ND		ug/L	1	"	10/05/1998 PJG
1,1,1,2-Tetrachloroethane	ND		ug/L	1	"	10/05/1998 PJG
1,1,2,2-Tetrachloroethane	ND		ug/L	1	"	10/05/1998 PJG
Tetrachloroethene	ND		ug/L	1	"	10/05/1998 PJG
Toluene	ND		ug/L	1	"	10/05/1998 PJG
1,1,1-Trichloroethane	ND		ug/L	1	"	10/05/1998 PJG
1,1,2-Trichloroethane	ND		ug/L	1	"	10/05/1998 PJG
Trichloroethene	ND		ug/L	1	"	10/05/1998 PJG
Trichlorofluoromethane	ND		ug/L	1	"	10/05/1998 PJG
1,2,3-Trichloropropane	ND		ug/L	1	"	10/05/1998 PJG
Vinyl Acetate	ND		ug/L	5	"	10/05/1998 PJG
Vinyl Chloride	ND		ug/L	1	"	10/05/1998 PJG
Xylene (Total)	ND		ug/L	3	"	10/05/1998 PJG

Surrogate(s)	Result	Unit	Limits	Method	Date/Analyst
Dibromofluoromethane	113	%	81-117	"	10/05/1998 PJG
Toluene-d8	108	%	87-114	"	10/05/1998 PJG
Bromofluorobenzene	100	%	84-108	"	10/05/1998 PJG

ND = Non Detectable

Project Manager

Jason A. Asher

Reported : 11/12/1998

CT&E ALASKA LABORATORY REPORT

CT&E Environmental Services Inc.

Laboratory Division

Laboratory Analysis Report

October 04, 1998

Jason Asher
CT & E Environmental Serv. Ana
1200 Conrad Industrial Dr.
Ludington, MI 49431-2681

Client Name	CT & E Environmental Serv. Anatech Di.
Project ID	NMED 9.98-WRC (a) (HRMB) [985638]
Printed	October 04, 1998

Enclosed are the analytical results associated with the above project.

As required by the state of Alaska and the USEPA, a formal Quality Assurance/Quality Control Program maintained by CT&E. A copy of our Quality Control Manual that outlines this program is available our request.

Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth in our Quality Assurance Program Plan.

If you have any questions regarding this report or if we can be of any other assistance, please call your CT&E Project Manager at (907) 562-2343.

The following descriptors may be found on your report which will serve to further qualify the data.

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value that falls below PQL, but is greater than the MDL.
B - Indicates the analyte is found in the blank associated with the sample.
* - The analyte has exceeded allowable limits.
GT - Greater Than
D - Secondary Dilution
LT - Less Than
! - Surrogate out of range

200 W. Potter Drive, **Anchorage, AK 99518-1605** — Tel: (907) 562-2343 Fax: (907) 561-5301
3180 Peger Road, **Fairbanks, AK 99709-5471** — Tel: (907) 474-8656 Fax: (907) 474-9685

CT&E Environmental Services Inc.

CT&E Ref.#	985638001	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/22/98 09:05
Client Sample ID	SP-3-98 84464-8677	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Hale

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
,ride	0.416	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Chloride	4.39	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	1.22	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	5.50	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638002	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/22/98 10:01
Client Sample ID	SP-3A-98 84464-8678	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
ride	0.386	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Chloride	3.45	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.143	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.116	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.911	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	4.87	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638003	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/22/98 11:05
Client Sample ID	SP-5-98 84464-8679	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Stale

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
ɔride	0.371	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Chloride	4.13	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.730	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	4.90	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638004	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/22/98 12:40
Client Sample ID	SP-4-98 84464-8680	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Hale

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
ride	0.396	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Chloride	6.48	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.139	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	1.24	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	10.0	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638005	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/22/98 15:00
Client Sample ID	SP-4A-98 84464-8681	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Stale

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
,ride	0.471	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Chloride	5.25	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.106	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.999	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	6.29	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638006	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/22/98 11:05
Client Sample ID	SP-5-98(A) 84464-8682	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Hale

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
,ride	0.351	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Chloride	4.07	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.110	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.720	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	5.02	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638007	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/23/98 09:17
Client Sample ID	SP-10-98 84492-8739	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Hale

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
ride	0.419	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Chloride	2.14	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.511	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	2.62	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638008	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/23/98 12:10
Client Sample ID	SP-DOE-98 84492-8740	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Stall

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
›ride	0.426	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Chloride	2.09	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.295	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	2.02	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638009	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/23/98 14:30
Client Sample ID	SP-9B-98 84492-8741	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
oride	0.437	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
..loride	2.25	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.136	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.438	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	2.27	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638010	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/23/98 11:00
Client Sample ID	SP-6-98 84492-8742	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Hale

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
›ride	0.323	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
.oride	2.25	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.417	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	2.64	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638011	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/24/98 12:30
Client Sample ID	SP-ANCHO-98 84492-8743	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Stale

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
ride	0.331	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
oride	2.15	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.322	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	2.47	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638012	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/21/98 19:00
Client Sample ID	Rinsate 9-98 84492-8476	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Hale

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
›ride	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
.oride	0.598	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.192	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	0.200 U	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638013	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/24/98 12:30
Client Sample ID	SP-ANCHO-98 84492-8744	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Stacy

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
›ride	0.334	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
.ıoride	2.29	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.324	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	2.46	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638014	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/24/98 12:30
Client Sample ID	SP-ANCHO-98 84492-8745	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Hale

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
oride	0.325	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
chloride	2.22	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.312	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	2.51	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CORE LABORATORY REPORT

CORE LABORATORIES

ANALYTICAL REPORT

JOB NUMBER: 985847

Prepared For:

Commercial Testing & Engineering
Anatech Division
1200 Conrad Industrial Dr
Ludington, MI 49431-2681

Attention: Jason Asher

Date: 11/02/98

Signature

Name: Don W. Ukele

Title: Project Manager

11/2/98
Date

420 West First Street
Casper, WY 82601

PHONE: 307-235-5741
FAX: 307-266-1676

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CORELAB

ENVIRONMENTAL TESTING SERVICES

Sample Delivery Group Narrative

November 2, 1998

Customer: Commercial Testing and Engineering
Project: NMED 9.98-WRC Spring
Core Laboratories Job Number: 985847

The following information is pertinent to the interpretation of the data.

On October 1, 1998, Core Laboratories - Casper received 14 water samples in good condition.

The Pu239 MS recovery is low at 69.8% recovery. The MSD for the Pu239 was acceptable and all other QC was acceptable for the batch, therefore the batch was not reanalyzed.

If you have any questions concerning this data package, please call me at (800) 666-0303.

Sincerely,

Debra Phillabaum
QA/QC Coordinator

Core Laboratories, Inc.
420 West First Street, Casper, Wyoming 82601, (307) 235-5741, (800) 666-0306, Fax (307) 266-1676

CORE LABORATORIES

SAMPLE INFORMATION
Date: 11/02/98

Job Number.: 985847
Customer ..: Commercial Testing & Engineering
Attn.....: Jason Asher

Project Number.....: 98000013
Customer Project ID....: NMED 9.98-WRC SPRING
Project Description....: general radiochemistry

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
985847-1	SP-3-98, White Rock CY	Water	09/22/98	09:05	10/01/98	09:30
985847-2	SP-3A-98, White Rock CY	Water	09/22/98	10:01	10/01/98	09:30
985847-3	SP-5-98, White Rock CY	Water	09/22/98	11:05	09/30/98	11:30
985847-4	SP-4-98, White Rock CY	Water	09/22/98	12:40	09/30/98	11:30
985847-5	SP-4A-98, White Rock CY	Water	09/22/98	15:00	09/30/98	11:30
985847-6	SP-5-98(A), White Rock CY	Water	09/22/98	11:05	10/01/98	09:30
985847-7	SP-10-98, White Rock CY	Water	09/23/98	09:17	10/01/98	09:30
985847-8	SP-DOE-98, White Rock CY	Water	09/23/98	12:10	10/01/98	09:30
985847-9	SP-9B-98, White Rock CY	Water	09/23/98	14:30	10/01/98	09:30
985847-10	SP-6-98, White Rock CY	Water	09/23/98	11:00	09/30/98	11:30
85847-11	SP-ANCHO-98, White Rock CY	Water	09/22/98	12:30	09/30/98	11:30
985847-12	SP-ANCHO-98 MS, White Rock CY	Water	09/22/98	12:30	09/30/98	11:30
985847-13	SP-ANCHO-98 MSD, White Rock CY	Water	09/22/98	12:30	09/30/98	11:30
985847-14	Rinsate 9-98, WRDOE-OB/HRMD	Water	09/21/98	19:00	10/01/98	09:30

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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-3-98, White Rock CY
Date Sampled.....: 09/22/98
Time Sampled.....: 09:05
Sample Matrix.....: Water

Laboratory Sample ID: 985847-1
Date Received.....: 10/01/98
Time Received.....: 09:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 3010	Acid Digestion, Total Metals (ICP)	Complete			10/13/98	jal
EPA 900.0	Gross Alpha, Activity, Total	ND		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, Error +/-, Total	0.5		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, LLD, Total	0.8		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Activity, Total	3.0		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Error +/-, Total	0.5		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, LLD, Total	0.7		pCi/L	10/07/98	dmf
mod. HASL 300	Plutonium-238, Activity, Total	0.1		pCi/L	10/21/98	dmf
HASL 300	Plutonium-238, Error +/-, Total	0.1		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-238, LLD, Total	0.3		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Total	0.3		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Error, Total	0.2		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, LLD, Total	0.2		pCi/L	10/21/98	dmf
EPA 905.0	Strontium-89 activity, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, error, +/-, Total	0.6		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, lLD, Total	1.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Error +/-, Total	0.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, LLD, Total	1.0		pCi/L	10/26/98	mdg
HASL 300 mod	Uranium-234, Activity, Total	1.6		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, Error +/-, Total	0.6		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, LLD, Total	0.3		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Activity, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Error +/-, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, LLD, Total	0.2		pCi/L	10/20/98	plj

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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-3-98, White Rock CY
Date Sampled.....: 09/22/98
Time Sampled.....: 09:05
Sample Matrix.....: Water

Laboratory Sample ID: 985847-1
Date Received.....: 10/01/98
Time Received.....: 09:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
HASL 300 mod	Uranium-238, Activity, Total	0.5		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, Error +/-, Total	0.3		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, LLD, Total	0.3		pCi/L	10/20/98	plj
SW-846 6010A	Metals Analysis (ICAP)					
	Silicon (Si), Total	21.9	0.7	mg/L	10/26/98	jal
	Strontium (Sr), Total	0.23	0.05	mg/L	10/26/98	jal

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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 985847

Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-3A-98, White Rock CY
Date Sampled.....: 09/22/98
Time Sampled.....: 10:01
Sample Matrix.....: Water

Laboratory Sample ID: 985847-2
Date Received.....: 10/01/98
Time Received.....: 09:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 3010	Acid Digestion, Total Metals (ICP)	Complete			10/13/98	jal
EPA 900.0	Gross Alpha, Activity, Total	0.3		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, Error +/-, Total	0.4		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, LLD, Total	0.7		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Activity, Total	1.5		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Error +/-, Total	0.5		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, LLD, Total	0.7		pCi/L	10/07/98	dmf
mod. HASL 300	Plutonium-238, Activity, Total	ND		pCi/L	10/21/98	dmf
HASL 300	Plutonium-238, Error +/-, Total	0.1		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-238, LLD, Total	0.3		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Total	0.2		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Error, Total	0.2		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, LLD, Total	0.2		pCi/L	10/21/98	dmf
EPA 905.0	Strontium-89 activity, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, error, +/-, Total	0.6		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, lLD, Total	1.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Error +/-, Total	0.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, LLD, Total	1.0		pCi/L	10/26/98	mdg
HASL 300 mod	Uranium-234, Activity, Total	0.9		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, Error +/-, Total	0.4		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, LLD, Total	0.3		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Activity, Total	ND		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Error +/-, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, LLD, Total	0.2		pCi/L	10/20/98	plj

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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-3A-98, White Rock CY
Date Sampled.....: 09/22/98
Time Sampled.....: 10:01
Sample Matrix.....: Water

Laboratory Sample ID: 985847-2
Date Received.....: 10/01/98
Time Received.....: 09:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
HASL 300 mod	Uranium-238, Activity, Total	0.7		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, Error +/-, Total	0.4		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, LLD, Total	0.2		pCi/L	10/20/98	plj
SW-846 6010A	Metals Analysis (ICAP)					
	Silicon (Si), Total	21.8	0.7	mg/L	10/26/98	jal
	Strontium (Sr), Total	0.22	0.05	mg/L	10/26/98	jal

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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 985847

Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-5-98, White Rock CY
Date Sampled.....: 09/22/98
Time Sampled.....: 11:05
Sample Matrix.....: Water

Laboratory Sample ID: 985847-3
Date Received.....: 09/30/98
Time Received.....: 11:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 3010	Acid Digestion, Total Metals (ICP)	Complete			10/13/98	jal
EPA 900.0	Gross Alpha, Activity, Total	0.3		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, Error +/-, Total	0.4		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, LLD, Total	0.7		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Activity, Total	2.1		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Error +/-, Total	0.5		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, LLD, Total	0.7		pCi/L	10/07/98	dmf
mod. HASL 300	Plutonium-238, Activity, Total	ND		pCi/L	10/21/98	dmf
HASL 300	Plutonium-238, Error +/-, Total	0.1		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-238, LLD, Total	0.4		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Total	0.1		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Error, Total	0.2		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, LLD, Total	0.3		pCi/L	10/21/98	dmf
EPA 905.0	Strontium-89 activity, Total	1.2		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, error, +/-, Total	0.6		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, lLD, Total	1.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Error +/-, Total	0.3		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, LLD, Total	1.0		pCi/L	10/26/98	mdg
HASL 300 mod	Uranium-234, Activity, Total	0.5		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, Error +/-, Total	0.3		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, LLD, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Activity, Total	ND		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Error +/-, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, LLD, Total	0.2		pCi/L	10/20/98	plj

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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 985847

Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-5-98, White Rock CY
Date Sampled.....: 09/22/98
Time Sampled.....: 11:05
Sample Matrix.....: Water

Laboratory Sample ID: 985847-3
Date Received.....: 09/30/98
Time Received.....: 11:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
HASL 300 mod	Uranium-238, Activity, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, Error +/-, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, LLD, Total	0.2		pCi/L	10/20/98	plj
SW-846 6010A	Metals Analysis (ICAP)					
	Silicon (Si), Total	28.6	0.7	mg/L	10/26/98	jal
	Strontium (Sr), Total	0.09	0.05	mg/L	10/26/98	jal

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LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-4-98, White Rock CY
Date Sampled.....: 09/22/98
Time Sampled.....: 12:40
Sample Matrix.....: Water

Laboratory Sample ID: 985847-4
Date Received.....: 09/30/98
Time Received.....: 11:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 3010	Acid Digestion, Total Metals (ICP)	Complete			10/13/98	jal
EPA 900.0	Gross Alpha, Activity, Total	ND		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, Error +/-, Total	0.4		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, LLD, Total	0.7		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Activity, Total	2.7		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Error +/-, Total	0.5		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, LLD, Total	0.7		pCi/L	10/07/98	dmf
mod. HASL 300	Plutonium-238, Activity, Total	0.4		pCi/L	10/21/98	dmf
HASL 300	Plutonium-238, Error +/-, Total	0.2		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-238, LLD, Total	0.4		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Total	0.5		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Error, Total	0.3		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, LLD, Total	0.3		pCi/L	10/21/98	dmf
EPA 905.0	Strontium-89 activity, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, error, +/-, Total	0.5		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, lLD, Total	1.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Error +/-, Total	0.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, LLD, Total	1.0		pCi/L	10/26/98	mdg
HASL 300 mod	Uranium-234, Activity, Total	0.5		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, Error +/-, Total	0.3		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, LLD, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Activity, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Error +/-, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, LLD, Total	0.2		pCi/L	10/20/98	plj

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LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-4-98, White Rock CY
Date Sampled.....: 09/22/98
Time Sampled.....: 12:40
Sample Matrix.....: Water

Laboratory Sample ID: 985847-4
Date Received.....: 09/30/98
Time Received.....: 11:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
HASL 300 mod	Uranium-238, Activity, Total	0.4		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, Error +/-, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, LLD, Total	0.2		pCi/L	10/20/98	plj
SW-846 6010A	Metals Analysis (ICAP)					
	Silicon (Si), Total	23.0	0.7	mg/L	10/26/98	jal
	Strontium (Sr), Total	0.13	0.05	mg/L	10/26/98	jal

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LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-4A-98, White Rock CY
Date Sampled.....: 09/22/98
Time Sampled.....: 15:00
Sample Matrix.....: Water

Laboratory Sample ID: 985847-5
Date Received.....: 09/30/98
Time Received.....: 11:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 3010	Acid Digestion, Total Metals (ICP)	Complete			10/13/98	jal
EPA 900.0	Gross Alpha, Activity, Total	0.6		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, Error +/-, Total	0.5		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, LLD, Total	0.7		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Activity, Total	1.7		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Error +/-, Total	0.5		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, LLD, Total	0.7		pCi/L	10/07/98	dmf
mod. HASL 300	Plutonium-238, Activity, Total	0.4		pCi/L	10/21/98	dmf
HASL 300	Plutonium-238, Error +/-, Total	0.2		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-238, LLD, Total	0.3		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Total	0.1		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Error, Total	0.2		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, LLD, Total	0.2		pCi/L	10/21/98	dmf
EPA 905.0	Strontium-89 activity, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, error, +/-, Total	0.5		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, lLD, Total	1.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Error +/-, Total	0.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, LLD, Total	1.0		pCi/L	10/26/98	mdg
HASL 300 mod	Uranium-234, Activity, Total	0.6		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, Error +/-, Total	0.3		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, LLD, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Activity, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Error +/-, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, LLD, Total	0.1		pCi/L	10/20/98	plj

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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-4A-98, White Rock CY
Date Sampled.....: 09/22/98
Time Sampled.....: 15:00
Sample Matrix.....: Water

Laboratory Sample ID: 985847-5
Date Received.....: 09/30/98
Time Received.....: 11:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
HASL 300 mod	Uranium-238, Activity, Total	0.4		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, Error +/-, Total	0.3		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, LLD, Total	0.2		pCi/L	10/20/98	plj
SW-846 6010A	Metals Analysis (ICAP)					
	Silicon (Si), Total	30.2	0.7	mg/L	10/26/98	jal
	Strontium (Sr), Total	0.10	0.05	mg/L	10/26/98	jal

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LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-5-98(A), White Rock CY
Date Sampled.....: 09/22/98
Time Sampled.....: 11:05
Sample Matrix.....: Water

Laboratory Sample ID: 985847-6
Date Received.....: 10/01/98
Time Received.....: 09:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 3010	Acid Digestion, Total Metals (ICP)	Complete			10/13/98	jal
EPA 900.0	Gross Alpha, Activity, Total	0.2		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, Error +/-, Total	0.5		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, LLD, Total	0.7		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Activity, Total	2.1		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Error +/-, Total	0.5		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, LLD, Total	0.7		pCi/L	10/07/98	dmf
mod. HASL 300	Plutonium-238, Activity, Total	0.3		pCi/L	10/21/98	dmf
HASL 300	Plutonium-238, Error +/-, Total	0.1		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-238, LLD, Total	0.4		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Total	0.2		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Error, Total	0.2		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, LLD, Total	0.2		pCi/L	10/21/98	dmf
EPA 905.0	Strontium-89 activity, Total	1.0		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, error, +/-, Total	0.6		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, lLD, Total	1.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Error +/-, Total	0.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, LLD, Total	1.0		pCi/L	10/26/98	mdg
HASL 300 mod	Uranium-234, Activity, Total	0.6		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, Error +/-, Total	0.3		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, LLD, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Activity, Total	ND		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Error +/-, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, LLD, Total	0.2		pCi/L	10/20/98	plj

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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-5-98(A), White Rock CY
Date Sampled.....: 09/22/98
Time Sampled.....: 11:05
Sample Matrix.....: Water

Laboratory Sample ID: 985847-6
Date Received.....: 10/01/98
Time Received.....: 09:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
HASL 300 mod	Uranium-238, Activity, Total	0.3		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, Error +/-, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, LLD, Total	0.2		pCi/L	10/20/98	plj
SW-846 6010A	Metals Analysis (ICAP)					
	Silicon (Si), Total	27.1	0.7	mg/L	10/26/98	jal
	Strontium (Sr), Total	0.09	0.05	mg/L	10/26/98	jal

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LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-10-98, White Rock CY
Date Sampled.....: 09/23/98
Time Sampled.....: 09:17
Sample Matrix.....: Water

Laboratory Sample ID: 985847-7
Date Received.....: 10/01/98
Time Received.....: 09:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 3010	Acid Digestion, Total Metals (ICP)	Complete			10/13/98	jal
EPA 900.0	Gross Alpha, Activity, Total	0.4		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, Error +/-, Total	0.5		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, LLD, Total	0.7		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Activity, Total	1.9		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Error +/-, Total	0.5		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, LLD, Total	0.7		pCi/L	10/07/98	dmf
mod. HASL 300	Plutonium-238, Activity, Total	0.2		pCi/L	10/29/98	plj
HASL 300	Plutonium-238, Error +/-, Total	0.1		pCi/L	10/29/98	plj
mod. HASL 300	Plutonium-238, LLD, Total	0.3		pCi/L	10/29/98	plj
mod. HASL 300	Plutonium-239/240, Total	0.3		pCi/L	10/29/98	plj
mod. HASL 300	Plutonium-239/240, Error, Total	0.2		pCi/L	10/29/98	plj
mod. HASL 300	Plutonium-239/240, LLD, Total	0.2		pCi/L	10/29/98	plj
EPA 905.0	Strontium-89 activity, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, error, +/-, Total	0.5		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, lLD, Total	1.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Error +/-, Total	0.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, LLD, Total	1.0		pCi/L	10/26/98	mdg
HASL 300 mod	Uranium-234, Activity, Total	0.4		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, Error +/-, Total	0.3		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, LLD, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Activity, Total	ND		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Error +/-, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, LLD, Total	0.2		pCi/L	10/20/98	plj

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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-10-98, White Rock CY
Date Sampled.....: 09/23/98
Time Sampled.....: 09:17
Sample Matrix.....: Water

Laboratory Sample ID: 985847-7
Date Received.....: 10/01/98
Time Received.....: 09:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
HASL 300 mod	Uranium-238, Activity, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, Error +/-, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, LLD, Total	0.2		pCi/L	10/20/98	plj
SW-846 6010A	Metals Analysis (ICAP)					
	Silicon (Si), Total	26.3	0.7	mg/L	10/26/98	jal
	Strontium (Sr), Total	0.06	0.05	mg/L	10/26/98	jal

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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-DOE-98, White Rock CY
Date Sampled.....: 09/23/98
Time Sampled.....: 12:10
Sample Matrix.....: Water

Laboratory Sample ID: 985847-8
Date Received.....: 10/01/98
Time Received.....: 09:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 3010	Acid Digestion, Total Metals (ICP)	Complete			10/13/98	jal
EPA 900.0	Gross Alpha, Activity, Total	ND		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, Error +/-, Total	0.4		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, LLD, Total	0.7		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Activity, Total	1.0		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Error +/-, Total	0.5		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, LLD, Total	0.7		pCi/L	10/07/98	dmf
mod. HASL 300	Plutonium-238, Activity, Total	ND		pCi/L	10/29/98	plj
HASL 300	Plutonium-238, Error +/-, Total	0.1		pCi/L	10/29/98	plj
mod. HASL 300	Plutonium-238, LLD, Total	0.2		pCi/L	10/29/98	plj
mod. HASL 300	Plutonium-239/240, Total	0.2		pCi/L	10/29/98	plj
mod. HASL 300	Plutonium-239/240, Error, Total	0.2		pCi/L	10/29/98	plj
mod. HASL 300	Plutonium-239/240, LLD, Total	0.2		pCi/L	10/29/98	plj
EPA 905.0	Strontium-89 activity, Total	1.2		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, error, +/-, Total	0.6		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, lLD, Total	1.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Error +/-, Total	0.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, LLD, Total	1.0		pCi/L	10/26/98	mdg
HASL 300 mod	Uranium-234, Activity, Total	0.3		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, Error +/-, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, LLD, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Activity, Total	ND		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Error +/-, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, LLD, Total	0.2		pCi/L	10/20/98	plj

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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-DOE-98, White Rock CY
Date Sampled.....: 09/23/98
Time Sampled.....: 12:10
Sample Matrix.....: Water

Laboratory Sample ID: 985847-8
Date Received.....: 10/01/98
Time Received.....: 09:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
HASL 300 mod	Uranium-238, Activity, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, Error +/-, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, LLD, Total	0.2		pCi/L	10/20/98	plj
SW-846 6010A	Metals Analysis (ICAP)					
	Silicon (Si), Total	34.2	0.7	mg/L	10/26/98	jal
	Strontium (Sr), Total	<0.05	0.05	mg/L	10/26/98	jal

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LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-9B-98, White Rock CY
Date Sampled.....: 09/23/98
Time Sampled.....: 14:30
Sample Matrix.....: Water

Laboratory Sample ID: 985847-9
Date Received.....: 10/01/98
Time Received.....: 09:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 3010	Acid Digestion, Total Metals (ICP)	Complete			10/13/98	jal
EPA 900.0	Gross Alpha, Activity, Total	ND		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, Error +/-, Total	0.4		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, LLD, Total	0.7		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Activity, Total	0.7		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Error +/-, Total	0.5		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, LLD, Total	0.7		pCi/L	10/07/98	dmf
mod. HASL 300	Plutonium-238, Activity, Total	ND		pCi/L	10/21/98	dmf
HASL 300	Plutonium-238, Error +/-, Total	0.1		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-238, LLD, Total	0.5		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Total	0.3		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Error, Total	0.3		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, LLD, Total	0.4		pCi/L	10/21/98	dmf
EPA 905.0	Strontium-89 activity, Total	0.2		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, error, +/-, Total	0.6		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, lLD, Total	1.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Error +/-, Total	0.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, LLD, Total	1.0		pCi/L	10/26/98	mdg
HASL 300 mod	Uranium-234, Activity, Total	0.4		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, Error +/-, Total	0.3		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, LLD, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Activity, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Error +/-, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, LLD, Total	0.1		pCi/L	10/20/98	plj

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LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-9B-98, White Rock CY
Date Sampled.....: 09/23/98
Time Sampled.....: 14:30
Sample Matrix.....: Water

Laboratory Sample ID: 985847-9
Date Received.....: 10/01/98
Time Received.....: 09:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
HASL 300 mod	Uranium-238, Activity, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, Error +/-, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, LLD, Total	0.2		pCi/L	10/20/98	plj
SW-846 6010A	Metals Analysis (ICAP)					
	Silicon (Si), Total	31.6	0.7	mg/L	10/26/98	jal
	Strontium (Sr), Total	<0.05	0.05	mg/L	10/26/98	jal

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LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-6-98, White Rock CY
Date Sampled.....: 09/23/98
Time Sampled.....: 11:00
Sample Matrix.....: Water

Laboratory Sample ID: 985847-10
Date Received.....: 09/30/98
Time Received.....: 11:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 3010	Acid Digestion, Total Metals (ICP)	Complete			10/13/98	jal
EPA 900.0	Gross Alpha, Activity, Total	ND		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, Error +/-, Total	0.2		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, LLD, Total	0.4		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Activity, Total	ND		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Error +/-, Total	0.4		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, LLD, Total	0.7		pCi/L	10/07/98	dmf
mod. HASL 300	Plutonium-238, Activity, Total	0.3		pCi/L	10/21/98	dmf
HASL 300	Plutonium-238, Error +/-, Total	0.1		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-238, LLD, Total	0.7		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Total	0.2		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Error, Total	0.3		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, LLD, Total	0.4		pCi/L	10/21/98	dmf
EPA 905.0	Strontium-89 activity, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, error, +/-, Total	0.5		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, lLD, Total	1.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Error +/-, Total	0.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, LLD, Total	1.0		pCi/L	10/26/98	mdg
HASL 300 mod	Uranium-234, Activity, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, Error +/-, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, LLD, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Activity, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Error +/-, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, LLD, Total	0.2		pCi/L	10/20/98	plj

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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-6-98, White Rock CY
Date Sampled.....: 09/23/98
Time Sampled.....: 11:00
Sample Matrix.....: Water

Laboratory Sample ID: 985847-10
Date Received.....: 09/30/98
Time Received.....: 11:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
HASL 300 mod	Uranium-238, Activity, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, Error +/-, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, LLD, Total	0.1		pCi/L	10/20/98	plj
SW-846 6010A	Metals Analysis (ICAP)					
	Silicon (Si), Total	25.2	0.7	mg/L	10/26/98	jal
	Strontium (Sr), Total	<0.05	0.05	mg/L	10/26/98	jal

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LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-ANCHO-98, White Rock CY
Date Sampled.....: 09/22/98
Time Sampled.....: 12:30
Sample Matrix.....: Water

Laboratory Sample ID: 985847-11
Date Received.....: 09/30/98
Time Received.....: 11:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 3010	Acid Digestion, Total Metals (ICP)	Complete			10/13/98	jal
EPA 900.0	Gross Alpha, Activity, Total	0.5		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, Error +/-, Total	0.4		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, LLD, Total	0.7		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Activity, Total	2.0		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Error +/-, Total	0.5		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, LLD, Total	0.7		pCi/L	10/07/98	dmf
mod. HASL 300	Plutonium-238, Activity, Total	0.2		pCi/L	10/21/98	dmf
HASL 300	Plutonium-238, Error +/-, Total	0.1		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-238, LLD, Total	0.4		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Total	0.2		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Error, Total	0.2		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, LLD, Total	0.3		pCi/L	10/21/98	dmf
EPA 905.0	Strontium-89 activity, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, error, +/-, Total	0.6		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, lLD, Total	1.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Error +/-, Total	0.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, LLD, Total	1.0		pCi/L	10/26/98	mdg
HASL 300 mod	Uranium-234, Activity, Total	0.3		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, Error +/-, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, LLD, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Activity, Total	ND		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Error +/-, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, LLD, Total	0.3		pCi/L	10/20/98	plj

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LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-ANCHO-98, White Rock CY
Date Sampled.....: 09/22/98
Time Sampled.....: 12:30
Sample Matrix.....: Water

Laboratory Sample ID: 985847-11
Date Received.....: 09/30/98
Time Received.....: 11:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
HASL 300 mod	Uranium-238, Activity, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, Error +/-, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, LLD, Total	0.2		pCi/L	10/20/98	plj
SW-846 6010A	Metals Analysis (ICAP)					
	Silicon (Si), Total	28.3	0.7	mg/L	10/26/98	jal
	Strontium (Sr), Total	<0.05	0.05	mg/L	10/26/98	jal

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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-ANCHO-98 MS, White Rock CY
Date Sampled.....: 09/22/98
Time Sampled.....: 12:30
Sample Matrix.....: Water

Laboratory Sample ID: 985847-12
Date Received.....: 09/30/98
Time Received.....: 11:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 3010	Acid Digestion, Total Metals (ICP)	Complete			10/13/98	jal
EPA 900.0	Gross Alpha, Activity, Total	0.2		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, Error +/-, Total	0.4		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, LLD, Total	0.6		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Activity, Total	1.2		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Error +/-, Total	0.5		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, LLD, Total	0.7		pCi/L	10/07/98	dmf
mod. HASL 300	Plutonium-238, Activity, Total	ND		pCi/L	10/21/98	dmf
HASL 300	Plutonium-238, Error +/-, Total	0.1		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-238, LLD, Total	0.4		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Total	0.1		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Error, Total	0.1		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, LLD, Total	0.3		pCi/L	10/21/98	dmf
EPA 905.0	Strontium-89 activity, Total	2.0		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, error, +/-, Total	0.7		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, lLD, Total	1.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Error +/-, Total	0.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, LLD, Total	1.0		pCi/L	10/26/98	mdg
HASL 300 mod	Uranium-234, Activity, Total	0.3		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, Error +/-, Total	0.3		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, LLD, Total	0.3		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Activity, Total	ND		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Error +/-, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, LLD, Total	0.2		pCi/L	10/20/98	plj

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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-ANCHO-98 MS, White Rock CY
Date Sampled.....: 09/22/98
Time Sampled.....: 12:30
Sample Matrix.....: Water

Laboratory Sample ID: 985847-12
Date Received.....: 09/30/98
Time Received.....: 11:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
HASL 300 mod	Uranium-238, Activity, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, Error +/-, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, LLD, Total	0.2		pCi/L	10/20/98	plj
SW-846 6010A	Metals Analysis (ICAP)					
	Silicon (Si), Total	32.7	0.7	mg/L	10/26/98	jal
	Strontium (Sr), Total	<0.05	0.05	mg/L	10/26/98	jal

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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-ANCHO-98 MSD, White Rock CY
Date Sampled.....: 09/22/98
Time Sampled.....: 12:30
Sample Matrix.....: Water

Laboratory Sample ID: 985847-13
Date Received.....: 09/30/98
Time Received.....: 11:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
SW-846 3010	Acid Digestion, Total Metals (ICP)	Complete			10/13/98	jal
EPA 900.0	Gross Alpha, Activity, Total	ND		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, Error +/-, Total	0.4		pCi/L	10/07/98	dmf
EPA 900.0	Gross Alpha, LLD, Total	0.7		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Activity, Total	2.7		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, Error +/-, Total	0.5		pCi/L	10/07/98	dmf
EPA 900.0	Gross Beta, LLD, Total	0.7		pCi/L	10/07/98	dmf
mod. HASL 300	Plutonium-238, Activity, Total	0.1		pCi/L	10/21/98	dmf
HASL 300	Plutonium-238, Error +/-, Total	0.1		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-238, LLD, Total	0.5		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Total	0.3		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, Error, Total	0.3		pCi/L	10/21/98	dmf
mod. HASL 300	Plutonium-239/240, LLD, Total	0.4		pCi/L	10/21/98	dmf
EPA 905.0	Strontium-89 activity, Total	0.9		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, error, +/-, Total	0.6		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-89, lLD, Total	1.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Total	ND		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, Error +/-, Total	0.4		pCi/L	10/26/98	mdg
EPA 905.0	Strontium-90, LLD, Total	1.0		pCi/L	10/26/98	mdg
HASL 300 mod	Uranium-234, Activity, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, Error +/-, Total	0.2		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-234, LLD, Total	0.3		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Activity, Total	ND		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, Error +/-, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-235, LLD, Total	0.2		pCi/L	10/20/98	plj

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CORE LABORATORIES

LABORATORY TEST RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Customer Sample ID: SP-ANCHO-98 MSD, White Rock CY
Date Sampled.....: 09/22/98
Time Sampled.....: 12:30
Sample Matrix.....: Water

Laboratory Sample ID: 985847-13
Date Received.....: 09/30/98
Time Received.....: 11:30

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
HASL 300 mod	Uranium-238, Activity, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, Error +/-, Total	0.1		pCi/L	10/20/98	plj
HASL 300 mod	Uranium-238, LLD, Total	0.2		pCi/L	10/20/98	plj
SW-846 6010A	Metals Analysis (ICAP)					
	Silicon (Si), Total	32.5	0.7	mg/L	10/26/98	jal
	Strontium (Sr), Total	<0.05	0.05	mg/L	10/26/98	jal

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CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Test Method.....: EPA 900.0 Batch.....: 10274 Analyst...: dmf
Method Description.: Gross alpha/beta Reporting Limit...: 0.1
Parameter.....: Gross Alpha, Activity Units.....: pCi/L

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	Units	Date/Time
MD	985847-2		0.5			0.3	0.2	ABS Diff.	10/07/98 1332
MS	985847-12	985847MSAB	45.0		63.8	0.2	70.2	% REC	10/07/98 1332
MS	985847-13	985847MSAB	57.6		63.8	ND	90.3	% REC	10/07/98 1332
MB		MB2AB1002	ND						10/07/98 1332
LCS		LC1A1002	24.8		25.5		97.3	% REC	10/07/98 1332

Test Method.....: EPA 900.0 Batch.....: 10274 Analyst...: dmf
Method Description.: Gross alpha/beta Reporting Limit...: 0.1
Parameter.....: Gross Beta, Activity Units.....: pCi/L

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	Units	Date/Time
MD	985847-2		2.7			1.5	57.1	RPD	10/07/98 1332
MS	985847-12	985847MSAB	41.1		45.0	1.2	88.7	% REC	10/07/98 1332
MS	985847-13	985847MSAB	48.6		45.0	2.7	102.0	% REC	10/07/98 1332
MB		MB2AB1002	0.1						10/07/98 1332
		LC1B1002	17.6		18.0		97.8	% REC	10/07/98 1332

Test Method.....: HASL 300 mod Batch.....: 10462 Analyst...: plj
Method Description.: Isotopic Uranium Reporting Limit...: 0.1
Parameter.....: Uranium-233/234, Activity Units.....: pCi/L

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	Units	Date/Time
MS	985892-2	985892MSU	7.8		7.2	0.1	106.9	% REC	10/20/98 1709
MSD	985892-2	985892MSU	8.4		7.2	0.1	115.3	% REC	10/20/98 1709
MD	985892-3		0.3			0.2	0.1	ABS Diff.	10/20/98 1709

Test Method.....: HASL 300 mod Batch.....: 10462 Analyst...: plj
Method Description.: Isotopic Uranium Reporting Limit...: 0.1
Parameter.....: Uranium-234, Activity Units.....: pCi/L

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	Units	Date/Time
MS	985892-2	985892MSU	7.8		7.2	0.1	106.9	% REC	10/20/98 1709
MSD	985892-2	985892MSU	8.4		7.2	0.1	115.3	% REC	10/20/98 1709
MD	985892-3		0.3			0.2	0.1	ABS Diff.	10/20/98 1709
MB		MB1U1016	0.5						10/20/98 1709
LCS		LCS1U1016	3.5		3.6		97.2	% REC	10/20/98 1709

Test Method.....: HASL 300 mod Batch.....: 10462 Analyst...: plj
Method Description.: Isotopic Uranium Reporting Limit...: 0.1
Parameter.....: Uranium-235, Activity Units.....: pCi/L

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	Units	Date/Time
MD	985892-3		ND			ND	0	ABS Diff.	10/20/98 1709
		MB1U1016	ND						10/20/98 1709

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CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Test Method.....: HASL 300 mod
Method Description.: Isotopic Uranium
Parameter.....: Uranium-238, Activity
Batch.....: 10462
Reporting Limit...: 0.1
Units.....: pCi/L
Analyst...: plj

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	Units	Date/Time
MS	985892-2	985892MSU	7.5		7.2	ND	104.2	% REC	10/20/98 1709
MSD	985892-2	985892MSU	7.3		7.2	ND	101.4	% REC	10/20/98 1709
MD	985892-3		0.1			ND	0.1	ABS Diff.	10/20/98 1709
MB		MB1U1016	0.2						10/20/98 1709
LCS		LCS1U1016	3.6		3.6		100.0	% REC	10/20/98 1709

Test Method.....: EPA 905.0
Method Description.: Strontium-89,90
Parameter.....: Strontium-89 activity
Batch.....: 10483
Reporting Limit...: 1.0
Units.....: pCi/L
Analyst...: mdg

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	Units	Date/Time
MS	985847-1	985847MSSR	42.7		44.4	ND	96.2	% REC	10/26/98 0713
MSD	985847-1	985847MSSR	45.7	42.7	44.4	ND	102.9	% REC	10/26/98 0713
							6.8	RPD	
MD	985847-6		ND			1.0	1.0	ABS Diff.	10/26/98 0713
		MB2SR1014	ND						10/26/98 0713
		LC1SR1014	24.9		22.2		112.2	% REC	10/26/98 0713

Test Method.....: EPA 905.0
Method Description.: Strontium-89,90
Parameter.....: Strontium-90
Batch.....: 10483
Reporting Limit...: 0.1
Units.....: pCi/L
Analyst...: mdg

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	Units	Date/Time
MD	985847-6		ND			ND	0	ABS Diff.	10/26/98 0713
MS	985847-9	985847MSSR	46.9		44.4	ND	105.6	% REC	10/26/98 0713
MSD	985847-9	985847MSSR	50.1	46.9	44.4	ND	112.8	% REC	10/26/98 0713
							6.6	RPD	
MB		MB2SR1014	ND						10/26/98 0713
LCS		LC2SR1014	23.5		22.2		105.9	% REC	10/26/98 0713

Test Method.....: SW-846 6010A
Method Description.: Metals Analysis (ICAP)
Parameter.....: Strontium (Sr)
Batch.....: 10486
Reporting Limit...: 0.05
Units.....: mg/L
Analyst...: jal

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	Units	Date/Time
ICL		981021A	10.25		10		102.5	% REC	10/26/98 1017
ICV		981013A	5.080		5.0		101.6	% REC	10/26/98 1024
ICB			0.0						10/26/98 1031
ISB		981026A	1.040		1.0		104.0	% REC	10/26/98 1037
PDS	985943-2	980173	1.047		1.000000	0.0049	104.2	% REC	10/26/98 1058
MB			0.0016						10/26/98 1104
LCS		980173	0.9982		1.000000		99.8	% REC	10/26/98 1111
CCV		981013A	5.215		5.0		104.3	% REC	10/26/98 1138
CCB			0.0						10/26/98 1145
CCV		981013A	5.101		5.0		102.0	% REC	10/26/98 1246
			0.0						10/26/98 1253
	985847-13		0.0309			0.0336	0.0027	ABS Diff.	10/26/98 1333

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CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Test Method.....: SW-846 6010A
Method Description.: Metals Analysis (ICAP)
Parameter.....: Strontium (Sr)
Batch.....: 10486
Reporting Limit...: 0.05
Units.....: mg/L
Analyst...: jal

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	Units	Date/Time
PDS	985847-13	980173	4.012		4.000000	0.0336	99.5	% REC	10/26/98 1347
CCV		981013A	5.022		5.0		100.4	% REC	10/26/98 1407
CCB			0.0						10/26/98 1414

Test Method.....: SW-846 6010A
Method Description.: Metals Analysis (ICAP)
Parameter.....: Silicon (Si)
Batch.....: 10487
Reporting Limit...: 0.7
Units.....: mg/L
Analyst...: jal

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	Units	Date/Time
ICL		980915B	48.03		50.0		96.1	% REC	10/26/98 1018
ICV		980915G	2.73		2.5		109.2	% REC	10/26/98 0957
ICB			0						10/26/98 0937
ISB		981026A	5.044		5.0		100.9	% REC	10/26/98 0916
PDS	985943-2	980086	1.763		1.000000	0.7960	96.7	% REC	10/26/98 0000
CCV		980915G	2.377		2.5		95.1	% REC	10/26/98 0733
			0						10/26/98 0713
		980915G	2.351		2.5		94.0	% REC	10/26/98 0407
CCB			0.0348						10/26/98 0347
MD	985847-13		32.55			32.53	0.1	RPD	10/26/98 0143
PDS	985847-13	980086	34.44		4.000000	32.53	47.8	% REC	10/26/98 0122
CCV		980915G	2.647		2.5		105.9	% REC	10/26/98 0021
CCB			0						10/26/98 0000

Test Method.....: mod. HASL 300
Method Description.: Isotopic Plutonium
Parameter.....: Plutonium-238, Activity
Batch.....: 10525
Reporting Limit...: 0.1
Units.....: pCi/L
Analyst...: dmf

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	Units	Date/Time
MD	985892-3		ND			0.5	0.5	ABS Diff.	10/21/98 1652
MB		MB1PU1015	ND						10/21/98 1652

Test Method.....: mod. HASL 300
Method Description.: Isotopic Plutonium
Parameter.....: Plutonium-239/240
Batch.....: 10525
Reporting Limit...: 0.5
Units.....: pCi/L
Analyst...: dmf

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	Units	Date/Time
MS	985892-1	985892MSPU	7.0		9.6	0.3	69.8	% REC	10/21/98 1652
MSD	985892-1	985892MSPU	8.8	7.0	9.6	0.3	88.5	% REC	10/21/98 1652
							22.8	RPD	
MD	985892-3		0.3			0.2	0.1	ABS Diff.	10/21/98 1652
MB		MB1PU1015	0.1						10/21/98 1652
LCS		LCS1PU1015	4.5		4.8		93.8	% REC	10/21/98 1652

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CORE LABORATORIES

QUALITY CONTROL RESULTS

Job Number: 985847 Date: 11/02/98

CUSTOMER: Commercial Testing & Engineering PROJECT: NMED 9.98-WRC SPRING ATTN: Jason Asher

Test Method.....: mod. HASL 300
Method Description.: Isotopic Plutonium
Parameter.....: Plutonium-238, Activity
Batch.....: 10558
Reporting Limit...: 0.1
Units.....: pCi/L
Analyst...: plj

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	Units	Date/Time
MD	985847-8		0.1			ND	0.1	ABS Diff.	10/29/98 1720
MB		MB1PU1028	0.1						10/29/98 1720

Test Method.....: mod. HASL 300
Method Description.: Isotopic Plutonium
Parameter.....: Plutonium-239/240
Batch.....: 10558
Reporting Limit...: 0.1
Units.....: pCi/L
Analyst...: plj

QC	Lab ID	Reagent	QC Result	QC Result	True Value	Orig. Value	Calc. Result	Units	Date/Time
MS	985847-7	985847MSPU	20.7		19.2	0.3	106.2	% REC	10/29/98 1720
MD	985847-8		0.1			0.2	0.1	ABS Diff.	10/29/98 1720
MB		MB1PU1028	0.1						10/29/98 1720
LCS		LCS1PU1028	5.6		4.8		116.7	% REC	10/29/98 1720

The analytical results, opinions or interpretations contained in this report are based upon information and material supplied by the client for whose exclusive and confidential use this report has been made. The analytical results, opinions or interpretations expressed represent the best judgment of Core Laboratories. Core Laboratories, however, makes no warranty or representation, express or implied, of any type, and expressly disclaims same as to the productivity, proper operations or profitableness of any oil, gas, coal or other mineral, property, well or sand in connection with which such report is used or relied upon for any reason whatsoever. This report shall not be reproduced, in whole or in part, without the written approval of Core Laboratories.

CORE LAB

CORE LABORATORIES

QUALITY CONTROL FOOTER

METHOD REFERENCES

(1) EPA 600/4-79-020, Methods for Chemical Analysis of Water and Wastes, March 1983
(2) EPA SW-846, Test Methods for Evaluating Solid Waste, Third Edition, (9/86), Update I (7/92), Update II (9/94), Update IIA (8/93), Update IIB (1/95), Update III (6/97)
(3) Standard Methods for the Examination of Water and Wastewater, 18th, 1992
(4) EPA 600/4-80-032, Prescribed Procedures for Measurement of Radioactivity in Drinking Water, August 1980
(5) Federal Register, Friday, October 26, 1984 (40 CFR Part 136)
(6) EPA 600/8-78-017, Microbiological Methods for Monitoring the Environment, December 1978

COMMENTS

(1) The data in the Laboratory Test Results Report may differ from the data in the QC Report due to calculations for sample preparation and/or dilutions.
(2) The "Time Analyzed" in the QC Report may not reflect the actual time of each analysis. The "Date Analyzed" is the actual date of analysis.
(3) Soil and sludge samples are reported on a wet basis or on an "as received" basis unless otherwise indicated.
(4) The data in this report are within the limits of uncertainty specified in the referenced method unless otherwise indicated.
(5) Analyses performed by a subcontract laboratory are indicated with an asterisk and associated code in the "Technician" data field.

Subcontract Laboratories	Code	Subcontract Laboratories	Code
Core Laboratories - Anaheim, CA	AN	Core Laboratories - Houston, TX (Pet)	HP
Core Laboratories - Aurora, CO	AU	Core Laboratories - Houston, TX (Env)	HR
Core Laboratories - Casper, WY	CA	Core Laboratories - Indianapolis, IN	IN
Core Laboratories - Corpus Christi, TX	CC	Core Laboratories - Lake Charles, LA	LC
Core Laboratories - Carson, CA	CR	Core Laboratories - Valparaiso, IN	VP
Core Laboratories - Edison, NJ	ED	Other Subcontract Laboratories	XX

DEFINITIONS

(1) NC = Not Calculable due to values lower than the reporting limit.
(2) ND = Not Detected above the reporting limit.

QC SAMPLE IDENTIFICATIONS

BLANKS

MB = Method Blank (also referred to as a preparation blank)
RB = Reagent Blank
IB = Instrument Blank
ICB = Initial Calibration Blank
CCB = Continuing Calibration Blank
HB = Holding Blank (also referred to as a storage blank)

DUPLICATES

MSD = Matrix Spike Duplicate
MD = Method Duplicate

SPIKES

MS = Matrix Spike
MSD = Matrix Spike Duplicate
PDS = Post Digestion Spike
BS = Blank Spike (also referred to as a method spike)
SS = Surrogate Spike

REFERENCE STANDARDS

CS = Calibration Standard
RS = Reference Standard (also referred to as an external reference standard)
ICV = Initial Calibration Verification
CCV = Continuing Calibration Verification
LCS = Laboratory Control Sample

420 West First Street
Casper, WY 82601
(307) 235-5741

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GENERAL CHEMISTRY QUALITY CONTROL

Alkalinity

CT & E Environmental Services, Inc. - Anatech Division

INORGANIC QC SUMMARY

ANALYTE:	Alkalinity	RUN DATE:	9/28/98
INSTRUMENT:	Titration	REPORT DATE:	11/12/98
PREP BATCH:		ANALYTICAL BATCH:	
DIGESTION DATE:		METHOD:	SM 2320B
ANALYST:	LS	REVIEW:	
UNITS:	mg/L	PROJECT #:	84464

BLANKS	CONC.	LOD	COMMENT
PREP BLANK			
ICB	ND	10	
CCB1	ND	10	
CCB2	ND	10	
CCB3	ND	10	
CCB4	ND	10	
CCB5			

ICV/CCV	TRUE	FOUND	% RECOVERY	COMMENT
ICV	250.0	234	93.6	
CCV1	250.0	234	93.6	
CCV2	250.0	232	92.8	
CCV3	250.0	234	93.6	
CCV4				
CCV5				

SPIKES	SPK ADDED	SAMPLE CONC	SPK CONC	% RECOVERY	C
LCS					
MS	125	245	362	93.60	
MSD	125	245	360	92.00	
Spiked Sample ID: 84409-8507			RPD=	1.72	

ASPK	SPK ADDED	SAMPLE CONC	ASPK CONC	% RECOVERY	C

MSA	SAMPLE ID:				
ADDITION 1:	ADDITION 2:	ADDITION 3:	ADDITION 4:	CORRELATION COEFFICIENT	VALUE

CT & E Environmental Services, Inc. - Anatech Division

INORGANIC QC SUMMARY

ANALYTE:	Alkalinity	RUN DATE:	9/28/98
INSTRUMENT:	Titration	REPORT DATE:	11/12/98
PREP BATCH:		ANALYTICAL BATCH:	
DIGESTION DATE:		METHOD:	SM 2320B
ANALYST:	LS	REVIEW:	
UNITS:	mg/L	PROJECT #:	84464

BLANKS	CONC.	LOD	COMMENT
PREP BLANK			
ICB	ND	10	
CCB1	ND	10	
CCB2	ND	10	
CCB3	ND	10	
CCB4	ND	10	
CCB5			

ICV/CCV	TRUE	FOUND	% RECOVERY	COMMENT
ICV	250.0	234	93.6	
CCV1	250.0	234	93.6	
CCV2	250.0	232	92.8	
CCV3	250.0	234	93.6	
CCV4				
CCV5				

SPIKES	SPK ADDED	SAMPLE CONC	SPK CONC	% RECOVERY	C
LCS					
MS	125	245	362	93.60	
MSD	125	245	360	92.00	

Spiked Sample ID: SP-5-98

RPD= 1.72

ASPK	SPK ADDED	SAMPLE CONC	ASPK CONC	% RECOVERY	C

MSA	SAMPLE ID:				
ADDITION 1:	ADDITION 2:	ADDITION 3:	ADDITION 4:	CORRELATION COEFFICIENT	VALUE

ALKALINITY

METHOD: 2320B ANALYST: [illegible] DATE: 9-28-98 MATRIX: H_2O UNITS: mg/L LOD: 10

Lab ID	Sample ID	Sample Amount ml/g	Initial pH	ml V_1 to pH 4.5	ml V_1 to pH 8.3	Vl ml	V pH 4.5	V to 8.3		Total Alkalinity	Carb. Alkalinity	Bicarb. Alkalinity	Hydrox. Alkalinity	LOD
	8558	50	>8.3	40.1	22.5	21.2	18.9	1.3	25.6	370	51	320		10
84423	8552		<8.3	17.1 50.0		0.9 40.1	26.1			510	ND	510		
	8553			30.8		17.1	13.7			270		270		
	8554			47.7		30.8	16.9			330		330		
84424	8559	* 32		3.5		0.2	3.3			100				
84464	8677	50	<8.3	7.8		3.5	4.3			85	ND	85		
	8678			11.9		7.8	4.1			81		81		
CCV		5/50		23.7		11.9	11.8			232				
CCB		50		~~30~~ 24.0		23.7	0.3			ND				
	8679		<8.3	28.0		24.0	4.0			79	ND	79		
	8679MS	47.5 sample 2.5 spike		37.8		28.0	9.8			193				
	8679MSD			47.0		37.8	9.2			181				
	8680	50	<8.3	4.8		~~4.0~~ 0.6	4.2			83	ND	83		
	8681			9.2		4.8	4.4			87		87		
	8682			13.2		9.2	4.0			79		79		
84445	8619			26.2		13.2	13.0			260		260		
CCV				38.1		26.2	11.9			234				
CCB				38.4		38.1	0.3			ND				

(*) only 32mls of sample left.

QC ICV____ TRUE____ MEAS____ % RECOVERY____

CCV 5126 TRUE ~~232~~ 250 MEAS 232 % RECOVERY 93%

CCV ↓ TRUE | MEAS 234 % RECOVERY 94%

SAMPLE ID 84464-8679 SAMPLE RESULTS 79 $\left(\frac{47.5}{50}\right)$ = 75 SPIKE ADDED 125 MATRIX SPIKE 193 MATRIX SPIKE DUP 181

% RECOVERY 94% % RECOVERY DUP 85% %RPD 10% TITRANT 530 NORMALITY 0.0197

ALKALINITY

METHOD: 2320B ANALYST: JS DATE: 9-28-98 MATRIX: H_2O UNITS: mg/L LOD: 10

Lab ID	Sample ID	Sample Amount ml/g	Initial pH	ml V_1 to pH 4.5	ml V_1 to pH 8.3	Vl ml	V pH 4.5	V to 8.3		Total Alkalinity	Carb. Alkalinity	Bicarb. Alkalinity	Hydrox. Alkalinity	LOD
ICB		50		2.6		2.4	0.2			ND				10
STD	51-27	5/50		14.6		2.6	12.0			N=0.0197				
ICV	51-26	5/50		26.5		14.6	11.9			234				
84408	8502	50	<8.3	37.6		26.5	11.1			220	ND	220		
	8503			8.7 50.0		0.2 31.6	20.9			410		410		
	8504			26.0		8.7	17.3			340		340		
	8505			50.0		26.0	24.0			470		470		
84421	8548			7.1		0.9	6.2			120		120		
84409	8506			25.7		7.1	18.6			370		370		
	8507			38.8		25.7	13.1			260		260		
	8507MS	425 spike 2.5 sample		7.3 50.0		0.1 38.8	18.4			362				
	8507MSD			29.6		7.3	18.3			360				
	8508	50	<8.3	~~39.4~~ 39.7		~~0.4~~ 25.6	13.5			270	ND	270		
	8509			6.4 ~~27.~~ 50.0		~~39.1~~ 0.4 ~~0.4~~	16.9			330		330		
	8510			27.2		6.4	20.8			410		410		
CCV		5/50		39.1		27.2	11.9			234				
CCB		50		39.4		39.1	0.3			ND				
84404	8481			6.5		2.2	4.3			85				
84425	8554		>8.3	14.8	7.0	6.5	8.3	0.5		160	ND	160		
	8557			21.2	15.3	14.8	6.4	0.5		130	ND	130		

QC

ICV 51-26 TRUE 250 MEAS 234 % RECOVERY 94%

CCV 51-26 TRUE 250 MEAS 234 % RECOVERY 94%

CCV ___ TRUE ___ MEAS ___ % RECOVERY ___

SAMPLE ID 84409-8507 SAMPLE RESULTS $258\left(\frac{425}{50}\right)=245$ SPIKE ADDED 129 MATRIX SPIKE 362 MATRIX SPIKE DUP 360

% RECOVERY 94% % RECOVERY DUP 92% %RPD 2% TITRANT 5301 NORMALITY 0.0197

CT & E Environmental Services, Inc. - Anatech Division

INORGANIC QC SUMMARY

ANALYTE:	Alkalinity	RUN DATE:	10/5/98
INSTRUMENT:	Titration	REPORT DATE:	11/12/98
PREP BATCH:		ANALYTICAL BATCH:	
DIGESTION DATE:		METHOD:	SM 2320B
ANALYST:	LS	REVIEW:	
UNITS:	mg/L	PROJECT #:	84492

BLANKS	CONC.	LOD	COMMENT
PREP BLANK			
ICB	ND	10	
CCB1	ND	10	
CCB2			
CCB3			
CCB4			
CCB5			

ICV/CCV	TRUE	FOUND	% RECOVERY	COMMENT
ICV	250.0	236	94.4	
CCV1	250.0	234	93.6	
CCV2				
CCV3				
CCV4				
CCV5				

SPIKES	SPK ADDED	SAMPLE CONC	SPK CONC	% RECOVERY	C
LCS					
MS	125	98	218	96.00	
MSD	125	98	216	94.40	
Spiked Sample ID: 84471-8697			RPD=	1.68	

ASPK	SPK ADDED	SAMPLE CONC	ASPK CONC	% RECOVERY	C

MSA	SAMPLE ID:				
ADDITION 1:	ADDITION 2:	ADDITION 3:	ADDITION 4:	CORRELATION COEFFICIENT	VALUE

METHOD: 2320B ANALYST: [illegible] DATE: 10-5-98 MATRIX: H_2O UNITS: mg/L LOD: 10

	Lab ID	Sample ID	Sample Amount ml/g	Initial pH	ml V_1 to pH 4.5	ml V_1 to pH 8.3	Vl ml	V pH 4.5	V to 8.3		Total Alkalinity	Carb. Alkalinity	Bicarb. Alkalinity	Hydrox. Alkalinity	LOD
	ICB	~~5/50~~	50		0.6		0.3	0.3			ND				10
S1-27	STD	~~5/50~~	5/50		12.5		0.6	11.9			N=0.0	198			
	ICV	S1-26	↓		24.4		12.5	11.9			236				
	84471	8697	50		29.6		24.4	5.2			100				
		8697MS	47.5 sample 2.5 spike		40.4		29.6	11.0			218				
		8697MSD	↓		11.1		0.2	10.9			216				
*	84492	8739	50	>8.3	14.8	15.6	11.1	3.7	0.8		73	32	41		
		8740		<8.3	18.2		15.6 ~~14.8~~	2.6			52	ND	52		
		8741			21.2		18.2	3.0			59	ND	59		
		8742			24.7		21.2	3.5			69		69		
		8743			27.9		24.7	3.2			63		63		
		8744			31.0		27.9	3.1			61		61		
		8745			34.3		31.0	3.3			65		65		
		8746			34.9		34.3	0.2			ND		ND		
OK	~~84524~~	~~8860~~		~~[illegible]~~	39.9		34.5 ~~34.5~~	5.4			110				
	84545	8908		>8.3	49.8	42.6	39.9	9.9	2.7		200	54	150		
	CCV		5/50		39.0		27.2	11.8			234				
	CCB		50		39.3		39.0	0.3			ND				

QC

ICV S1-26 TRUE 250 MEAS 234 % RECOVERY 94%

CCV S1-26 TRUE 250 MEAS 234 % RECOVERY 94%

CCV _____ TRUE _____ MEAS _____ % RECOVERY _____

SAMPLE ID 84471-8697 SAMPLE RESULTS $103\left(\frac{47.5}{50}\right) = 98$ SPIKE ADDED 125 MATRIX SPIKE 218 MATRIX SPIKE DUP 216

% RECOVERY 96% % RECOVERY DUP 94% %RPD 2% TITRANT S3-01 NORMALITY 0.0198

* Reason: Sample had Carb-started @ 14.8

Ammonia

CT&E - Anatech Division
INORGANIC QC REPORT

ANALYTE: NH_3
INSTRUMENT: Lachat
BATCH #:
DIGESTION DATE: 9-25-98
ANALYST: KA
UNITS: mg/L

RUN DATE: 9-28-98
REPORT DATE: 9-28-98
RUN #: Am092898A
METHOD:
REVIEW:
PROJECT #: 84464

BLANKS	CONC.	LOD	COMMENT
PREP BLANK	0.00	0.03	ND
ICB	~~0.00~~ 0.010d	0.03	ND
CCB1	0.0059		
CCB2	0.0057		
CCB3	0.0058		
CCB4	0.0051		
CCB5	0.0024		

ICV/CCV	TRUE	FOUND	% RECOVERY	COMMENT
ICV	.50	.5208	104%	
CCV1	.50	.5301	106%	
CCV2		.5114	102%	
CCV3		.5289	106%	
CCV4		.5373	107%	
CCV5		.5287	106%	

SPIKES	SPK ADDED	SAMPLE CONC	SPK CONC	% RECOVERY	C
PREP SPK	.5	0	.5052	101%	
MS	.5	1.1631	1.5971	87%	
MSD	.5	1.1631	1.5717	82%	
			RPD=		

ASPK	SPK ADDED	SAMPLE CONC	ASPK CONC	% RECOVERY	C

MSA	SAMPLE ID:				
ADDITION 1:	ADDITION 2:	ADDITION 3:	ADDITION 4:	CORRELATION COEFFICIENT	VALUE
0					

Singinor

OPERATOR:	Kraig
ACQ. TIME:	Sep 28, 1998 11:07:34
DATA FILENAME:	C:\OMNION\DATA\AM09288A.FDT
METHOD FILENAME:	C:\OMNION\METHODS\NH3.MET
TRAY FILENAME:	C:\OMNION\TRAYS\NH3WRKNG.TRA

TRAY DESCRIPTION:

Created:	Sep 28, 1998 10:33:46
Modified:	Sep 28, 1998 12:52:36

AM TRAY

DATA DESCRIPTION:

Created:	Sep 28, 1998 11:07:34
Modified:	Sep 28, 1998 11:07:34

Method - Ch. 1 (AMMONIA)

METHOD DESCRIPTION:

Created:	Oct 16, 1995 10:29:36
Modified:	Sep 23, 1998 11:30:13

AMMONIA

ANALYTE DATA:

Analyte Name:	AMMONIA
Concentration Units:	mg N/L
Chemistry:	Direct
Inject to Peak Start (s):	28.0
Peak Base Width (s):	26.000
% Width Tolerance:	100.000
Threshold:	2000.000
Autodilution Trigger:	Off
QuikChem Method:	10-107-06-1-B

CALIBRATION DATA:

Levels:

1 : 5.000 2 : 2.500 3 : 1.000 4 : 0.500
5 : 0.100 6 : 0.030 7 : 0.000

Calibration Rep Handling:	Average
Calibration Fit Type:	2nd Order Poly
Force Though Zero:	No
Weighting Method:	1/X
Concentration Scaling:	None

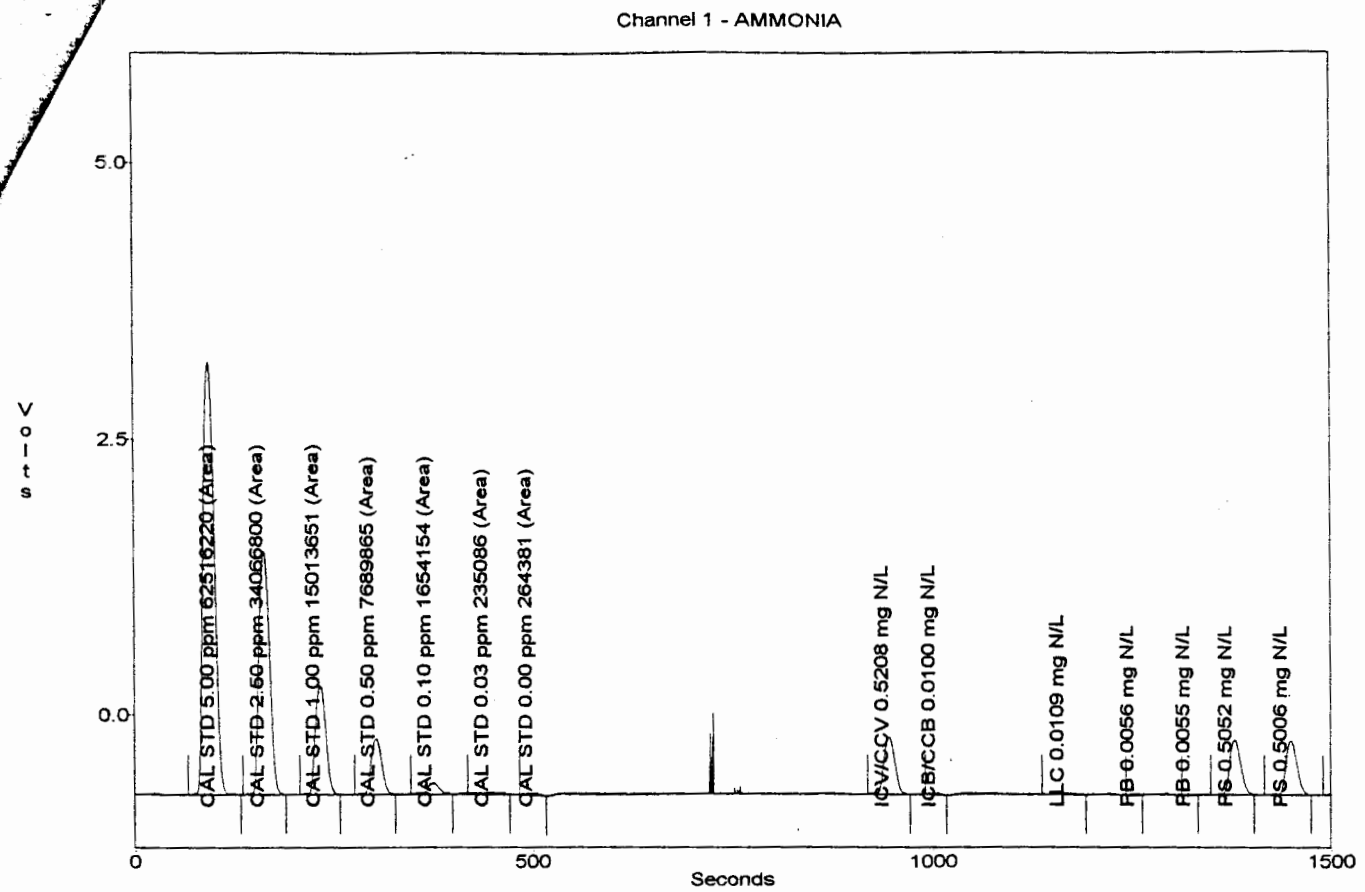
SAMPLER TIMING:

Method Cycle Period:	72.0
Min. Probe in Wash Period:	26.0
Probe in Sample Period:	35.0

*** Prep Sequence Not Enabled ***

VALVE TIMING:

Method Cycle Period:	72.0
Sample Reaches 1st Valve:	20.0
Valve:	On
Load Time:	0.0
Load Period:	30.0
Inject Period:	42.0



Sample Information/Results: Ch. 1
AMMONIA (Cup Range: 1 - 9999)

Calibration Standards:

Cup: 1, Sample ID: CAL STD 5.00 ppm, Sample Type: CalStd
Rep 1/1, Level: 1, Peak Area: 62516220.0000 µv-s

Cup: 2, Sample ID: CAL STD 2.50 ppm, Sample Type: CalStd
Rep 1/1, Level: 2, Peak Area: 34066800.0000 µv-s

Cup: 3, Sample ID: CAL STD 1.00 ppm, Sample Type: CalStd
Rep 1/1, Level: 3, Peak Area: 15013651.0000 µv-s

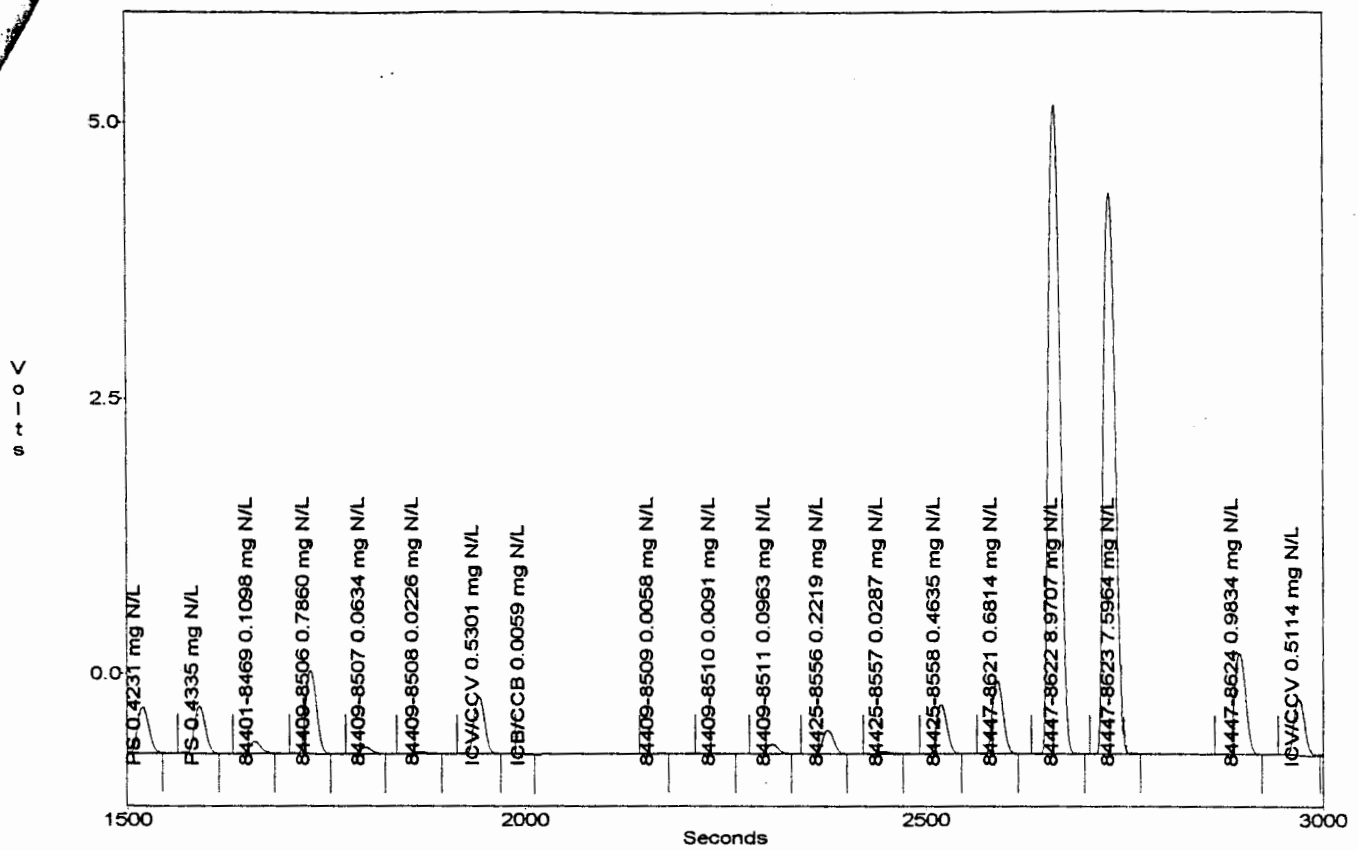
Cup: 4, Sample ID: CAL STD 0.50 ppm, Sample Type: CalStd
Rep 1/1, Level: 4, Peak Area: 7689864.5000 µv-s

Cup: 5, Sample ID: CAL STD 0.10 ppm, Sample Type: CalStd
Rep 1/1, Level: 5, Peak Area: 1654154.3750 µv-s

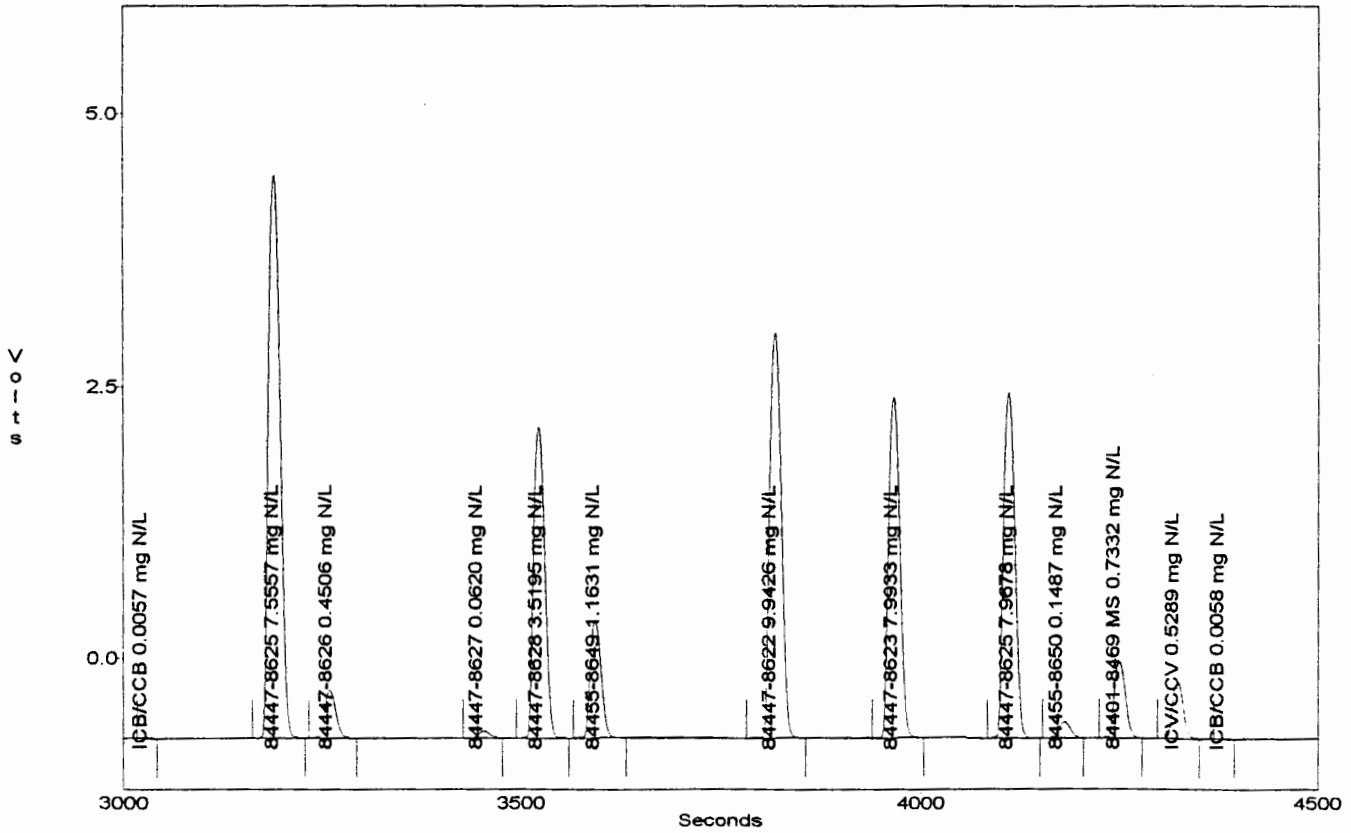
Cup: 6, Sample ID: CAL STD 0.03 ppm, Sample Type: CalStd
Rep 1/1, Level: 6, Peak Area: 235085.6719 µv-s

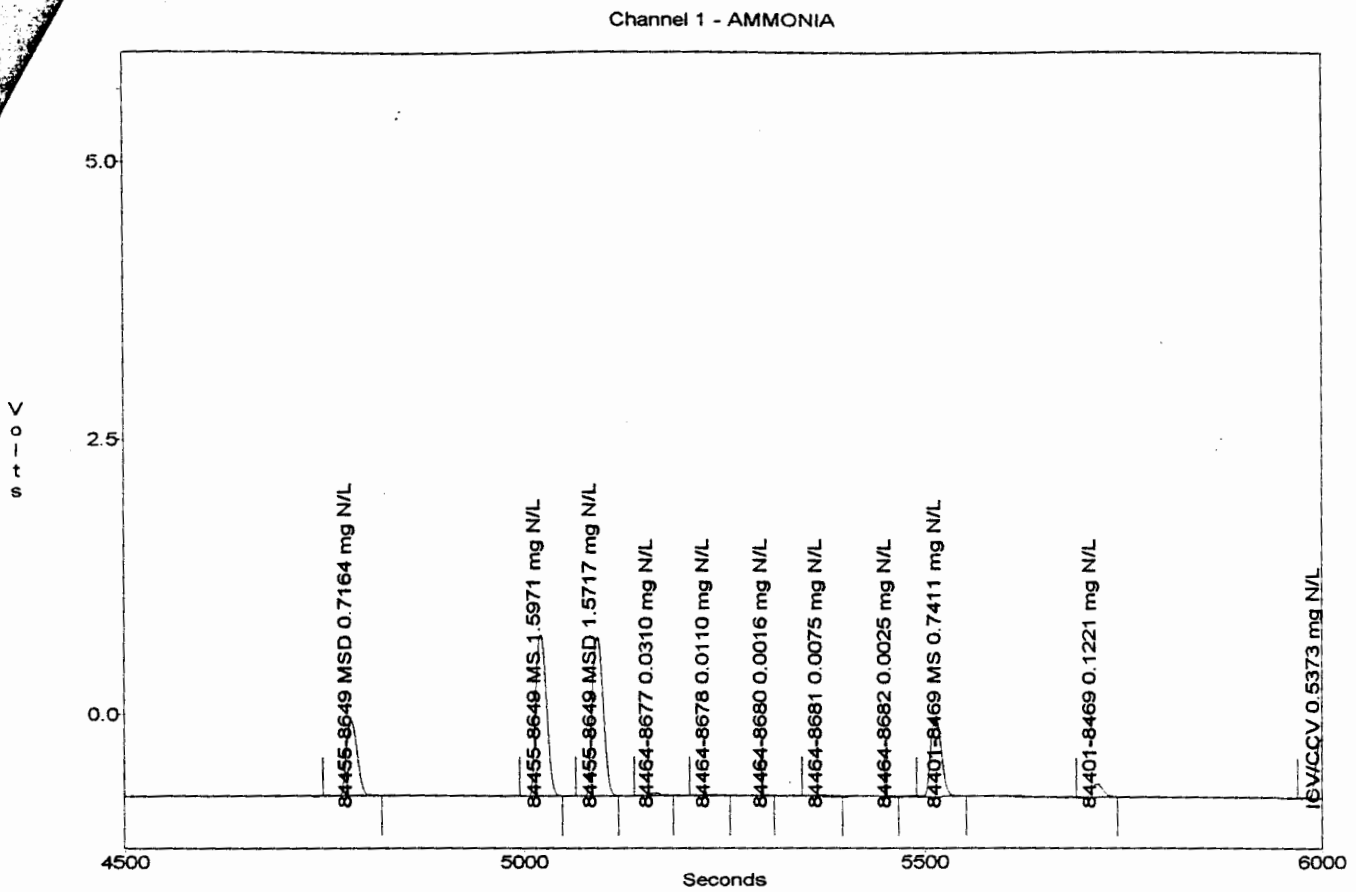
Cup: 7, Sample ID: CAL STD 0.00 ppm, Sample Type: CalStd
Rep 1/1, Level: 7, Peak Area: 264381.4375 µv-s

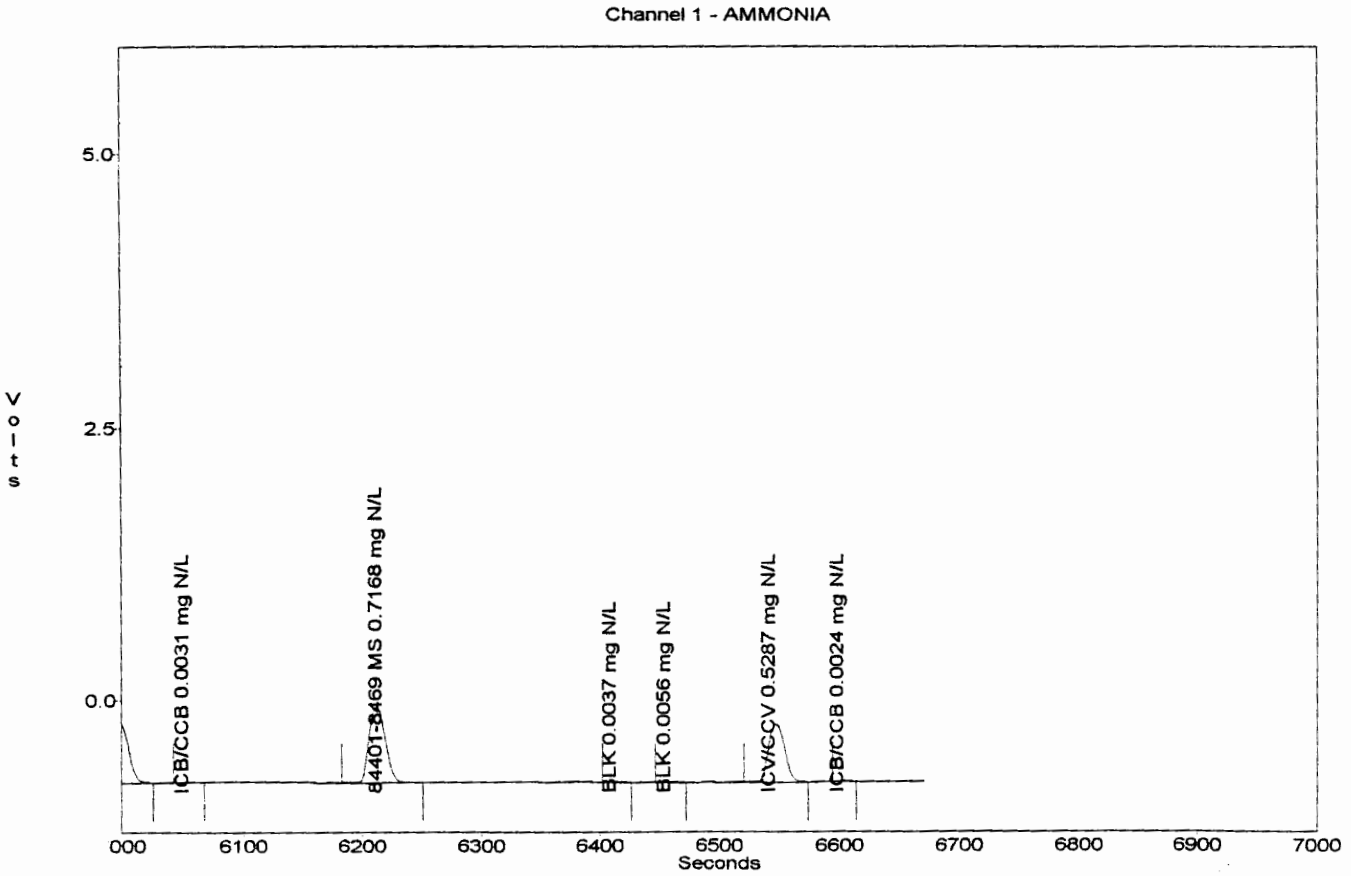
Channel 1 - AMMONIA



Channel 1 - AMMONIA




Channel 1 - AMMONIA
Volts
5.0
2.5
0.0
84455-8649 MSD 0.7164 mg N/L
84455-8649 MS 1.5971 mg N/L
84455-8649 MSD 1.5717 mg N/L
84464-8677 0.0310 mg N/L
84464-8678 0.0110 mg N/L
84464-8680 0.0016 mg N/L
84464-8681 0.0075 mg N/L
84464-8682 0.0025 mg N/L
84401-8469 MS 0.7411 mg N/L
84401-8469 0.1221 mg N/L
ICV/CCV 0.5373 mg N/L
4500
5000
5500
6000
Seconds


Channel 1 - AMMONIA
Volts
5.0
2.5
0.0
ICB/CCB 0.0031 mg N/L
84401-8469 MS 0.7168 mg N/L
BLK 0.0037 mg N/L
BLK 0.0056 mg N/L
ICV/CCV 0.5287 mg N/L
ICB/CCB 0.0024 mg N/L
000
6100
6200
6300
6400
6500
6600
6700
6800
6900
7000
Seconds

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 1 -- Cup Range: 1 to 90

Cup	Sample ID	Sampling Time	Rep. #	AMMONIA (mg N/L)	Man Dil Factor	Auto Dil Factor	
	PB	11:26:41	1	0.0056	1.0	1.00	
	PS	11:29:03	1	0.5052	1.0	1.00	101%
5	PS	11:30:13	1	0.5006	1.0	1.00	100%
6	PS	11:31:23	1	0.4231	1.0	1.00	85%
7	PS	11:32:33	1	0.4335	1.0	1.00	87%
8	84401-8469	11:33:42	1	0.1098	1.0	1.00	
8	84401-8469	12:41:19	1	0.1221	1.0	1.00	
9	84409-8506	11:34:52	1	0.7860	1.0	1.00	
10	84409-8507	11:36:02	1	0.0634	1.0	1.00	
11	84409-8508	11:37:12	1	0.0226	1.0	1.00	
12	84409-8509	11:42:14	1	0.0058	1.0	1.00	
13	84409-8510	11:43:23	1	0.0091	1.0	1.00	
14	84409-8511	11:44:33	1	0.0963	1.0	1.00	
15	84425-8556	11:45:42	1	0.2219	1.0	1.00	
16	84425-8557	11:46:52	1	0.0287	1.0	1.00	
17	84425-8558	11:48:03	1	0.4635	1.0	1.00	
18	84447-8621	11:49:14	1	0.6814	1.0	1.00	
19	84447-8622	11:50:25	1	8.9707	1.0	1.00	
19	84447-8622	12:09:42	1	9.9426	1.0	2.00	
20	84447-8623	11:51:35	1	7.5964	1.0	1.00	
20	84447-8623	12:12:09	1	7.9933	1.0	2.00	
21	84447-8624	11:54:19	1	0.9834	1.0	1.00	
22	84447-8625	11:59:11	1	7.5557	1.0	1.00	
22	84447-8625	12:14:34	1	7.9678	1.0	2.00	
23	84447-8626	12:00:21	1	0.4506	1.0	1.00	
24	84447-8627	12:03:37	1	0.0620	1.0	1.00	
[illegible]	84447-8628	12:04:46	1	14.0778	4.0	1.00	
	84455-8649	12:05:56	1	1.1631	1.0	1.00	
27	84455-8650	12:15:44	1	0.1487	1.0	1.00	
28	84401-8469 MS	12:16:53	1	0.7332	1.0	1.00	
28	84401-8469 MS	12:37:57	1	0.7411	1.0	1.00	
28	84401-8469 MS	12:49:35	1	0.7168	1.0	1.00	119%
29	84455-8649 MSD	12:25:46	1	0.7164	1.0	1.00	119
30	84455-8649 MS	12:29:46	1	1.5971	1.0	1.00	87%
31	84455-8649 MSD	12:30:56	1	1.5717	1.0	1.00	82%
32	84464-8677	12:32:07	1	0.0621	2.0	1.00	
33	84464-8678	12:33:18	1	0.0220	2.0	1.00	
34	84464-8680	12:34:28	1	0.0032	2.0	1.00	
35	84464-8681	12:35:38	1	0.0150	2.0	1.00	
36	84464-8682	12:36:48	1	0.0050	2.0	1.00	
46	BLK	12:52:46	1	0.0037	1.0	1.00	
47	BLK	12:53:57	1	0.0056	1.0	1.00	

Multi-Channel Table
Type: DQM
Channel Range: 1 to 1 – Cup Range: 1 to 16

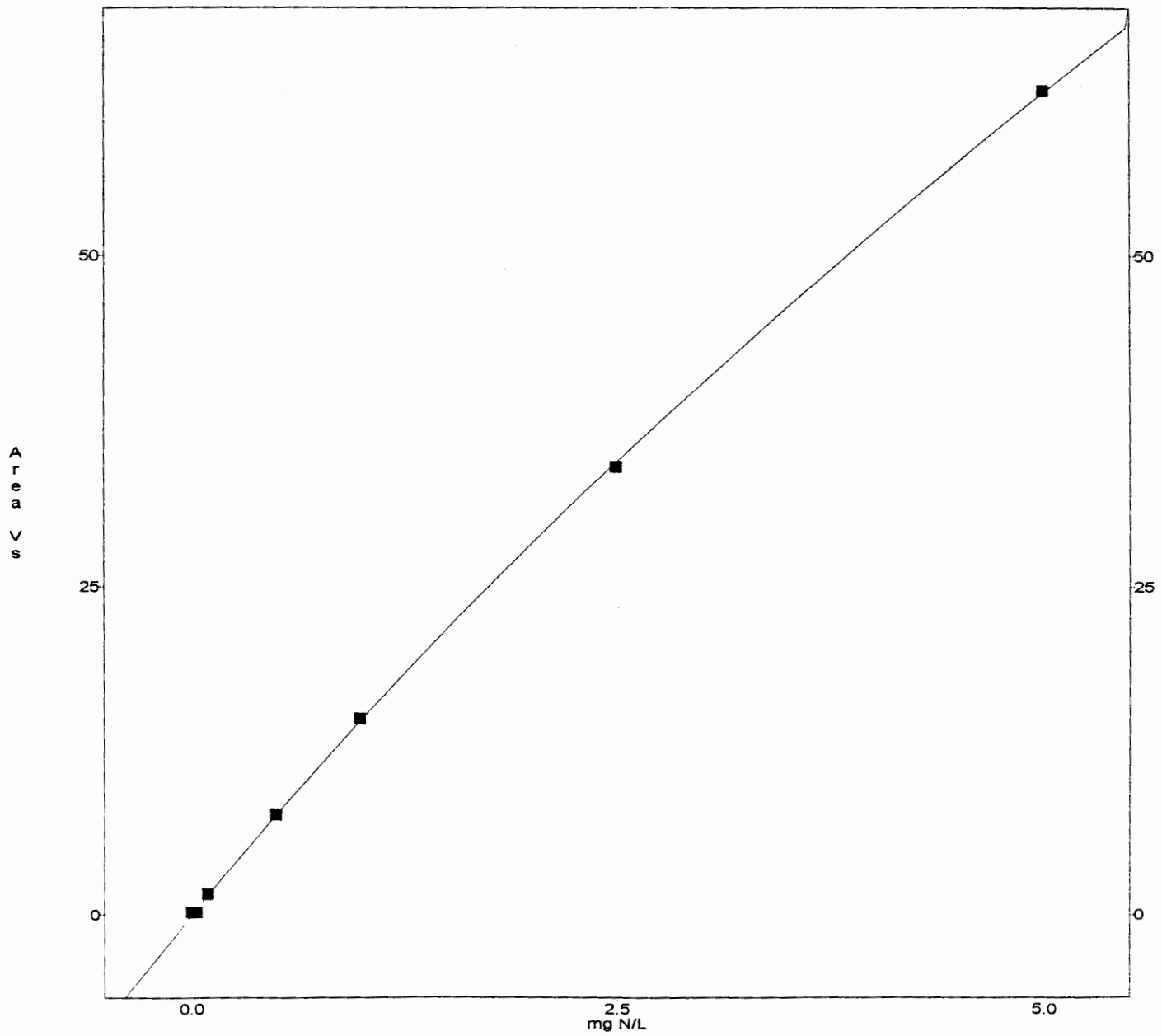
Cup	Sample ID	Sample Type	Sampling Time	Rep #	AMMONIA (mg N/L)	Man Dil Factor	Auto Dil Factor
1	LLC	RelChkStd	11:25:31	1	0.0109	1.0	1.00
			Known Concentration:		0.0300		
			% Difference:		-63.7404		
3	PB	RelChkStd	11:27:52	1	0.0055	1.0	1.00
			Known Concentration:		0.5000		
			% Difference:		-98.8999		
15	ICV/CCV	RelChkStd	11:21:49	1	0.5208	1.0	1.00
			Known Concentration:		0.5000		
			% Difference:		4.1535		
15	ICV/CCV	RelChkStd	11:38:25	1	0.5301	1.0	1.00
			Known Concentration:		0.5000		
			% Difference:		6.0284		
15	ICV/CCV	RelChkStd	11:55:33	1	0.5114	1.0	1.00
			Known Concentration:		0.5000		
			% Difference:		2.2822		
15	ICV/CCV	RelChkStd	12:18:06	1	0.5289	1.0	1.00
			Known Concentration:		0.5000		
			% Difference:		5.7868		
15	ICV/CCV	RelChkStd	12:46:02	1	0.5373	1.0	1.00
			Known Concentration:		0.5000		
			% Difference:		7.4587		
15	ICV/CCV	RelChkStd	12:55:10	1	0.5287	1.0	1.00
			Known Concentration:		0.5000		
			% Difference:		5.7354		
16	ICB/CCB	Blank	11:23:02	1	0.0100	1.0	1.00
16	ICB/CCB	Blank	11:39:39	1	0.0059	1.0	1.00
16	ICB/CCB	Blank	11:56:47	1	0.0057	1.0	1.00
16	ICB/CCB	Blank	12:19:22	1	0.0058	1.0	1.00
16	ICB/CCB	Blank	12:47:16	1	0.0031	1.0	1.00
16	ICB/CCB	Blank	12:56:24	1	0.0024	1.0	1.00

AMMONIA

vl	Area	mg N/L	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Replic STD	Replic % RSD	Residual 2nd Poly
1	62516220	5.00	62516220					0.0	0.0	-0.3
2	34066800	2.50	34066800					0.0	0.0	1.3
3	15013651	1.00	15013651					0.0	0.0	-1.0
4	7689865	0.50	7689865					0.0	0.0	-0.3
5	1654154	0.10	1654154					0.0	0.0	-5.0
6	235086	0.03	235086					0.0	0.0	51.3
7	264381	0.00	264381					0.0	0.0	

2nd Order Poly
Conc = 2.749e-016 Area² + 6.316e-008 Area - 2.471e-004
r = 1.0000

Scaling: None - Weighting: 1/X



.ed: Monday, September 28, 1998 - 11:55 AM

INSTRUMENT LOG

	PROJ. #	SMPL. #	DATE	ANALYST	AMC9283A COMMENTS
1	[illegible]		9-28	KA	ND
2	PA				
3	PB				
4	PS				10.1%
5	PS				100%
6	PS				25%
7	PS				87%
8	84401	8467			
9	84409	8506			
10		8507			
11		8508			
12		8509			
13		8510			
14		8511			
15	84425	8555			
16		8557			
17		8558			
18	84447	8621			
19		8622			x2
20		8623			x2
21		8624			
22		8625			x2
23		8626			
24		8627			
25		8628			x4
26	84455	8649			
27		8650			
28	84401	8469 MS			119%
29		MSD			119%
30	84455	8649 MS			87%
31		MSD			75%
32	84464	8677			x2
33		8678			x2
34		8680			x2
35		8681			x2
36		8682			x2

PROJ. #	SMPL. #	DATE	ANALYST	COMMENTS
PB		9-25	KA	Batch 016
PB				
PS				
PS				
84461	8469			
84469	8501			
	8502			
	8503			
	8504			
	8505			
	8506			
	8507			
84425	8556			
	8557			
	8558			
~~84421~~	~~8573~~			
84447	8621			
	8622			
	8623			
	8624			
	8625			
	8626			
	8627			
	8628			x4
84455	8649			
	8650			
84401	8616-9MS			
	MSD			
84455	8649MS			
	MSD			

LACHAT [redacted] INSTRUMENT LOG [redacted] TARDAL

PROJ.#	SMPL.#	DATE	ANALYST	COMMENTS
1441.4	8677	9-28		x2
	8678			x2
	8680			x2
	8681			x2
	8682			x2
PS				
PS				

CT & E Environmental Services, Inc. - Anatech Division

INORGANIC QC SUMMARY

ANALYTE:	Ammonia Nitrogen	RUN DATE:	10/1/98
INSTRUMENT:	Lachate QC 8000	REPORT DATE:	11/12/98
PREP BATCH:		ANALYTICAL BATCH:	AM10018A
DIGESTION DATE:	9/30/98	METHOD:	350.1
ANALYST:	KA/JS	REVIEW:	
UNITS:	mg/L	PROJECT #:	84464

BLANKS	CONC.	LOD	COMMENT
PREP BLANK	ND	0.03	
ICB	ND	0.03	
CCB1	ND	0.03	
CCB2	ND	0.03	
CCB3	ND	0.03	
CCB4			
CCB5			

ICV/CCV	TRUE	FOUND	% RECOVERY	COMMENT
ICV	0.5	0.5164	103.3	
CCV1	0.5	0.5233	104.7	
CCV2	0.5	0.5096	101.9	
CCV3	0.5	0.5056	101.1	
CCV4				
CCV5				

SPIKES	SPK ADDED	SAMPLE CONC	SPK CONC	% RECOVERY	C
LCS	0.5		0.428	85.60	
MS (84492-8744)	0.5	0.0029	0.4448	88.38	
MSD (84492-8745)	0.5	0.0029	0.4635	92.12	
Spike Sample: SP-Ancho-98			RPD=	4.12	

ASPK	SPK ADDED	SAMPLE CONC	ASPK CONC	% RECOVERY	C

MSA	SAMPLE ID:				
ADDITION 1:	ADDITION 2:	ADDITION 3:	ADDITION 4:	CORRELATION COEFFICIENT	VALUE

OPERATOR:	Kraig
ACQ. TIME:	Oct 1, 1998 8:48:41
DATA FILENAME:	C:\OMNION\DATA\AM10018A.FDT
METHOD FILENAME:	C:\OMNION\METHODS\NH3.MET
TRAY FILENAME:	C:\OMNION\TRAYS\NH3WRKNG.TRA

TRAY DESCRIPTION:

Created:	Oct 1, 1998 8:13:49
Modified:	Oct 1, 1998 9:14:54

AM TRAY

DATA DESCRIPTION:

Created:	Oct 1, 1998 8:48:41
Modified:	Oct 1, 1998 8:48:41

Method - Ch. 1 (AMMONIA)

METHOD DESCRIPTION:

Created:	Oct 16, 1995 10:29:36
Modified:	Sep 28, 1998 13:07:27

AMMONIA

ANALYTE DATA:

Analyte Name:	AMMONIA
Concentration Units:	mg N/L
Chemistry:	Direct
Inject to Peak Start (s):	28.0
Peak Base Width (s):	26.000
% Width Tolerance:	100.000
hreshold:	2000.000
Autodilution Trigger:	Off
QuikChem Method:	10-107-06-1-B

CALIBRATION DATA:

Levels:

1 : 5.000 2 : 2.500 3 : 1.000 4 : 0.500
5 : 0.100 6 : 0.030 7 : 0.000

Calibration Rep Handling:	Average
Calibration Fit Type:	2nd Order Poly
Force Though Zero:	No
Weighting Method:	1/X
Concentration Scaling:	None

SAMPLER TIMING:

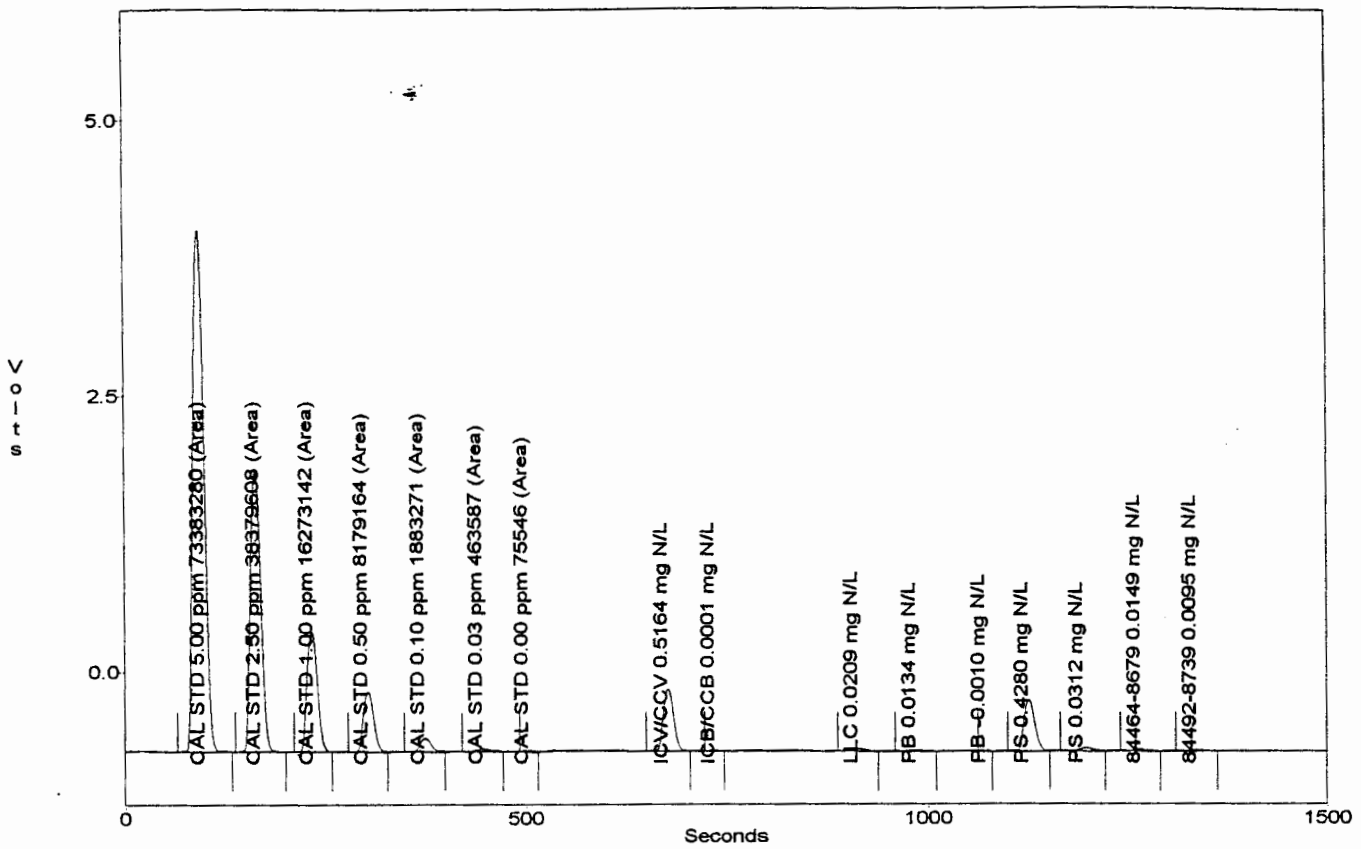
Method Cycle Period:	72.0
Min. Probe in Wash Period:	26.0
Probe in Sample Period:	35.0

*** Prep Sequence Not Enabled ***

VALVE TIMING:

Method Cycle Period:	72.0
Sample Reaches 1st Valve:	20.0
Valve:	On
Load Time:	0.0
oad Period:	30.0
ject Period:	42.0

Channel 1 - AMMONIA



Sample Information/Results: Ch. 1
AMMONIA (Cup Range: 1 - 9999)

Calibration Standards:

Cup: 1, Sample ID: CAL STD 5.00 ppm, Sample Type: CalStd
Rep 1/1, Level: 1, Peak Area: 73383280.0000 µv-s

Cup: 2, Sample ID: CAL STD 2.50 ppm, Sample Type: CalStd
Rep 1/1, Level: 2, Peak Area: 38379608.0000 µv-s

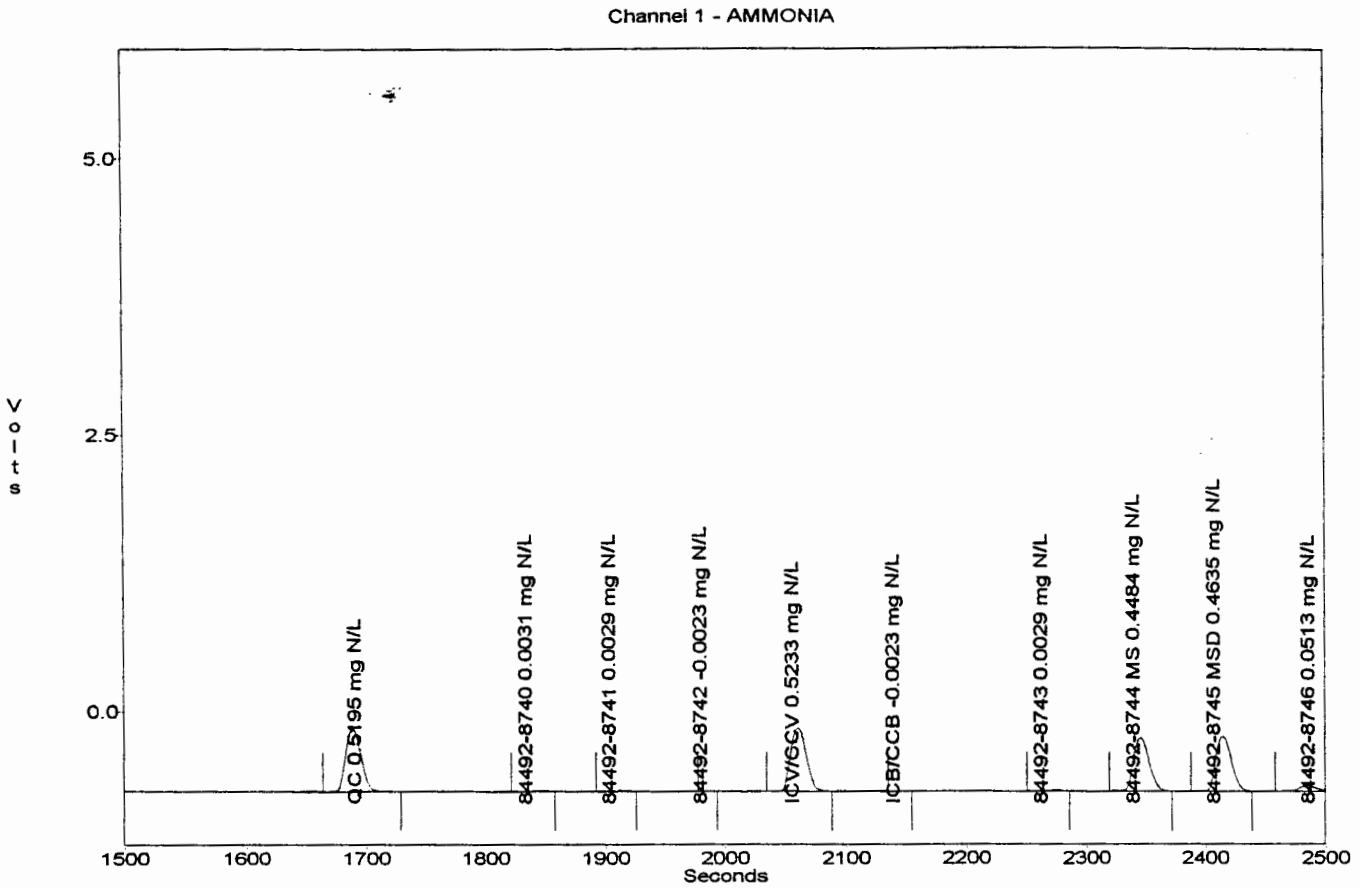
Cup: 3, Sample ID: CAL STD 1.00 ppm, Sample Type: CalStd
Rep 1/1, Level: 3, Peak Area: 16273142.0000 µv-s

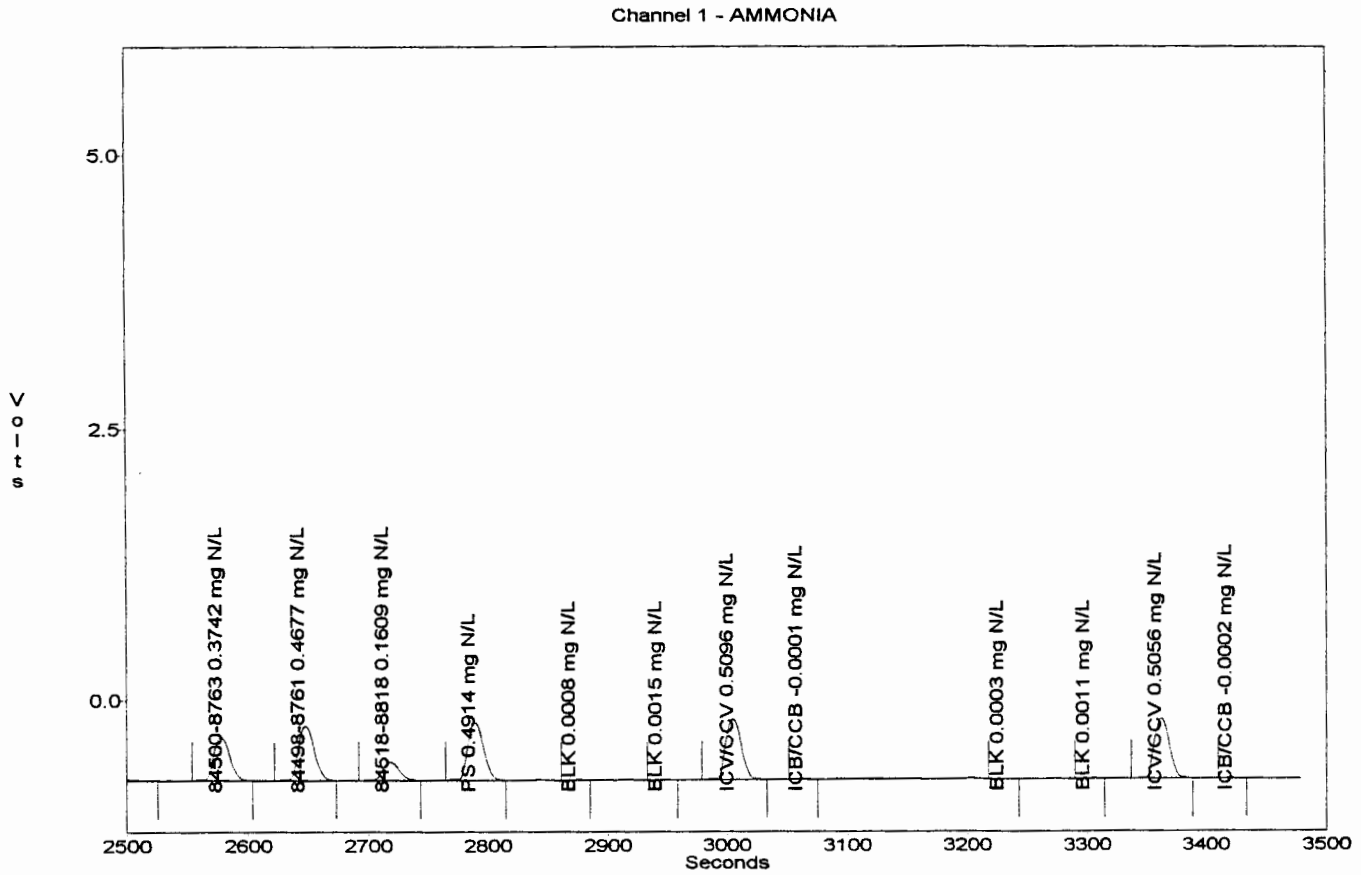
Cup: 4, Sample ID: CAL STD 0.50 ppm, Sample Type: CalStd
Rep 1/1, Level: 4, Peak Area: 8179163.5000 µv-s

Cup: 5, Sample ID: CAL STD 0.10 ppm, Sample Type: CalStd
Rep 1/1, Level: 5, Peak Area: 1883270.8750 µv-s

Cup: 6, Sample ID: CAL STD 0.03 ppm, Sample Type: CalStd
Rep 1/1, Level: 6, Peak Area: 463586.6563 µv-s

Cup: 7, Sample ID: CAL STD 0.00 ppm, Sample Type: CalStd
Rep 1/1, Level: 7, Peak Area: 75545.6484 µv-s


Channel 1 - AMMONIA
Volts
5.0
2.5
0.0
QC 0.5195 mg N/L
84492-8740 0.0031 mg N/L
84492-8741 0.0029 mg N/L
84492-8742 -0.0023 mg N/L
ICV/CCV 0.5233 mg N/L
ICB/CCB -0.0023 mg N/L
84492-8743 0.0029 mg N/L
84492-8744 MS 0.4484 mg N/L
84492-8745 MSD 0.4635 mg N/L
84492-8746 0.0513 mg N/L
1500
1600
1700
1800
1900
2000
2100
2200
2300
2400
2500
Seconds


Channel 1 - AMMONIA
Volts
5.0
2.5
0.0
84560-8763 0.3742 mg N/L
84498-8761 0.4677 mg N/L
84618-8818 0.1609 mg N/L
PS 0.4914 mg N/L
BLK 0.0008 mg N/L
BLK 0.0015 mg N/L
ICV/CCV 0.5096 mg N/L
ICB/CCB -0.0001 mg N/L
BLK 0.0003 mg N/L
BLK 0.0011 mg N/L
ICV/CCV 0.5056 mg N/L
ICB/CCB -0.0002 mg N/L
2500
2600
2700
2800
2900
3000
3100
3200
3300
3400
3500
Seconds

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 1 – Cup Range: 1 to 90

Cup	Sample ID	Sampling Time	Rep #	AMMONIA (mg N/L)	Man Dil Factor	Auto Dil Factor
	PB	09:03:37	1	0.0134	1.0	1.00
3	PB	09:04:48	1	-0.0010	1.0	1.00
5	PS	09:07:09	1	0.0312	1.0	1.00
6	84464-8679	09:08:19	1	0.0298	2.0	1.00
7	84492-8739	09:09:29	1	0.0190	2.0	1.00
8	84492-8740	09:17:59	1	0.0062	2.0	1.00
9	84492-8741	09:19:09	1	0.0058	2.0	1.00
10	84492-8742	09:20:18	1	-0.0046	2.0	1.00
11	84492-8743	09:25:07	1	0.0058	2.0	1.00
12	84492-8744 MS	09:26:17	1	0.8968	2.0	1.00
13	84492-8745 MSD	09:27:27	1	0.9269	2.0	1.00
14	84492-8746	09:28:37	1	KA ~~0.0515~~ .1026	2.0	1.00
15	84500-8763	09:30:09	1	0.3742	1.0	1.00
16	84498-8761	09:31:19	1	0.4677	1.0	1.00
17	84518-8818	09:32:30	1	0.1609	1.0	1.00
18	PS	09:33:41	1	0.4914	1.0	1.00
31	BLK	09:34:52	1	0.0008	1.0	1.00
31	BLK	09:36:03	1	0.0015	1.0	1.00
32	BLK	09:40:49	1	0.0003	1.0	1.00
32	BLK	09:42:00	1	0.0011	1.0	1.00
90	QC	09:15:21	1	1.0391	2.0	1.00

Multi-Channel Table
Type: DQM
Channel Range: 1 to 1 – Cup Range: 1 to 16

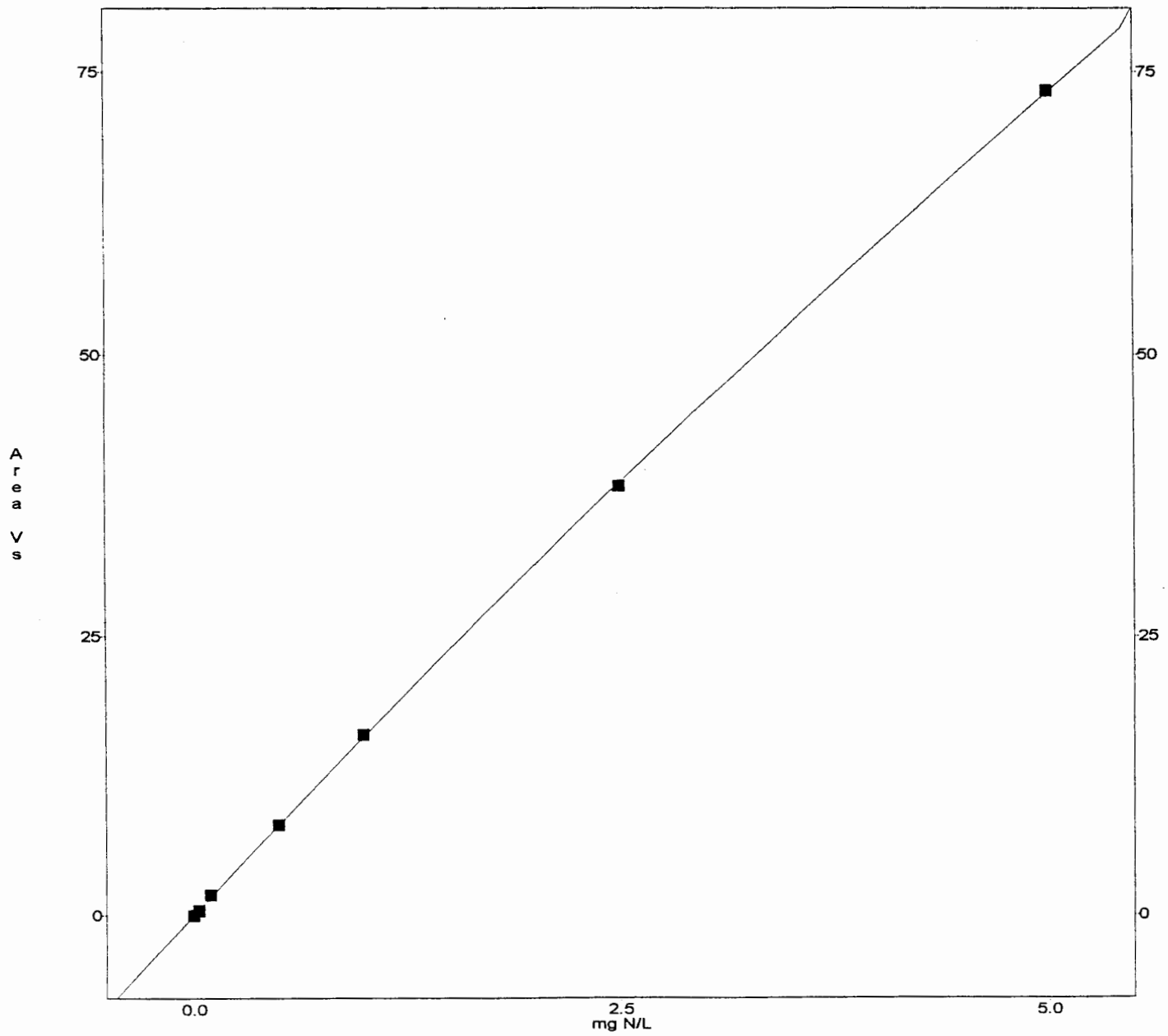
Cup	Sample ID	Sample Type	Sampling Time	Rep #	AMMONIA (mg N/L)	Man Dil Factor	Auto Dil Factor
1	LLC	RelChkStd	09:02:27	1	0.0209	1.0	1.00
			Known Concentration:		0.0300		
			% Difference:		-30.2326		
4	PS	RelChkStd	09:05:59	1	0.4280	1.0	1.00
			Known Concentration:		0.5000		
			% Difference:		-14.3987		
15	ICV/CCV	RelChkStd	08:58:29	1	0.5164	1.0	1.00
			Known Concentration:		0.5000		
			% Difference:		3.2856		
15	ICV/CCV	RelChkStd	09:21:32	1	0.5233	1.0	1.00
			Known Concentration:		0.5000		
			% Difference:		4.6697		
15	ICV/CCV	RelChkStd	09:37:17	1	0.5096	1.0	1.00
			Known Concentration:		0.5000		
			% Difference:		1.9268		
15	ICV/CCV	RelChkStd	09:43:13	1	0.5056	1.0	1.00
			Known Concentration:		0.5000		
			% Difference:		1.1268		
16	ICB/CCB	Blank	08:59:42	1	0.0001	1.0	1.00
16	ICB/CCB	Blank	09:22:45	1	-0.0023	1.0	1.00
16	ICB/CCB	Blank	09:38:30	1	-0.0001	1.0	1.00
16	ICB/CCB	Blank	09:44:27	1	-0.0002	1.0	1.00

AMMONIA

Lv	Area	mg N/L	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Replic STD	Replic % RSD	Residual 2nd Poly
	3383280	5.00	73383280					0.0	0.0	-0.2
	38379608	2.50	38379608					0.0	0.0	0.9
3	16273142	1.00	16273142					0.0	0.0	-1.0
4	8179164	0.50	8179164					0.0	0.0	0.3
5	1883271	0.10	1883271					0.0	0.0	-10.4
6	463587	0.03	463587					0.0	0.0	19.7
7	75546	0.00	75546					0.0	0.0	

2nd Order Poly
Conc = 1.055e-016 Area² + 6.058e-008 Area - 4.028e-003
r = 1.0000

Scaling: None - Weighting: 1/X



Thursday, October 01, 1998 - 09:34 AM

Lachat

INSTRUMENT LOG

	PROJ. #	SMPL. #	DATE	ANALYST	~~AMOY~~ 10/1/98 COMMENTS AM100198A
1	LLC		10-1-98	KA	
2	DB				NM
3	DB				ND
4	DS				26%
5	DS				
6	84414	8679			x2
7	84442	8739			
8		40			
9		41			
10		42			
11		43			
12		44 MB			.5 spike 8.9%
13		45 MBS			.5 spike 9.2%
14		46			
15	84500	8763			
16	84498	8761			
17	84518	8818			
18	DS				98%

NH3 Logbook

	PROJ. #	SMPL. #	DATE	ANALYST	COMMENTS
					Batch 047
	PB				
	PB				
	PS				
	PS				
	84464	8679			x2
	84492	8739			
		40			
		41			
		42			
		43			
		44 MS			.5 spike
		45 MSD			.5 spike
		46			
	84522	8763			
	84498	8761			
	84518	8818			
	PS				

Cyanide

CT & E Environmental Services, Inc. - Anatech Division

INORGANIC QC SUMMARY

ANALYTE:	CN	RUN DATE:	9/29/98
INSTRUMENT:	LACHATE QC 8000	REPORT DATE:	11/12/98
PREP BATCH:	1	ANALYTICAL BATCH:	CN09298A
DIGESTION DATE:	9/28/98	METHOD:	335.2
ANALYST:	LS	REVIEW:	
UNITS:	mg/L	PROJECT #:	84464

BLANKS	CONC.	LOD	COMMENT
PREP BLANK	ND	0.005	
ICB	ND	0.005	
CCB1	ND	0.005	
CCB2	ND	0.005	
CCB3			
CCB4			
CCB5			

ICV/CCV	TRUE	FOUND	% RECOVERY	COMMENT
ICV	0.1	0.0957	95.7	
CCV1	0.1	0.1003	100.3	
CCV2	0.1	0.0976	97.6	
CCV3				
CCV4				
CCV5				

SPIKES	SPK ADDED	SAMPLE CONC	SPK CONC	% RECOVERY	C
LCS	0.2		0.2073	103.65	
MS (84464-8677)	0.1	ND	0.1017	101.70	
MSD (84464-8677)	0.1	ND	0.1055	105.50	
Spike Sample: SP-3-98			RPD=	3.67	

ASPK	SPK ADDED	SAMPLE CONC	ASPK CONC	% RECOVERY	C

MSA	SAMPLE ID:				
ADDITION 1:	ADDITION 2:	ADDITION 3:	ADDITION 4:	CORRELATION COEFFICIENT	VALUE

CYANIDE

mtds 335.1, 335.2, 7.3.3.2

OPERATOR:	Leann
ACQ. TIME:	Sep 29, 1998 10:35:01
DATA FILENAME:	C:\OMNION\DATA\CN09298A.FDT
METHOD FILENAME:	C:\OMNION\METHODS\CN-.MET
TRAY FILENAME:	C:\OMNION\TRAYS\CNWRK.TRA

Method - Ch. 1 (CYANIDE)

METHOD DESCRIPTION:

Created:	Jul 25, 1995 11:07:06
Modified:	Sep 25, 1998 10:28:09

CYANIDE

ANALYTE DATA:

Analyte Name:	CYANIDE
Concentration Units:	mg CN- /L
Chemistry:	Direct
Inject to Peak Start (s):	30.0
Peak Base Width (s):	30.000
% Width Tolerance:	100.000
Threshold:	250.000
Autodilution Trigger:	On
QuikChem Method:	10-204-00-1-A

CALIBRATION DATA:

Levels:

1 : 0.500 2 : 0.200 3 : 0.100 4 : 0.050
5 : 0.010 6 : 0.005 7 : 0.000

alibration Rep Handling:	Average
alibration Fit Type:	2nd Order Poly
Force Though Zero:	No
Weighting Method:	None
Concentration Scaling:	None

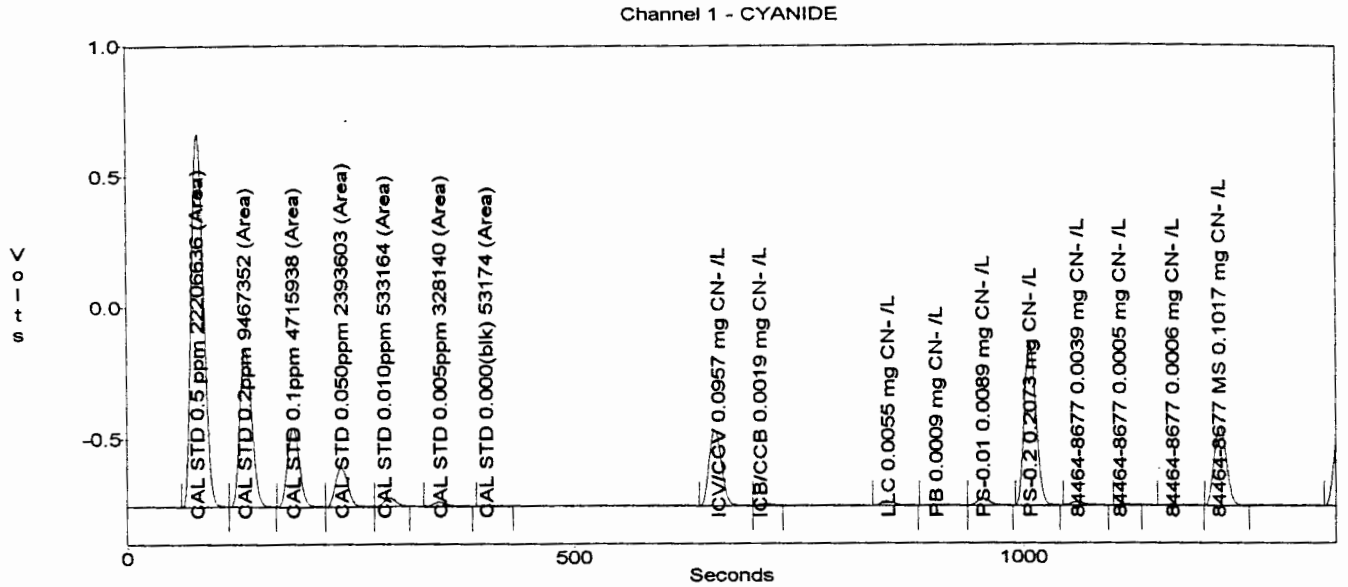
SAMPLER TIMING:

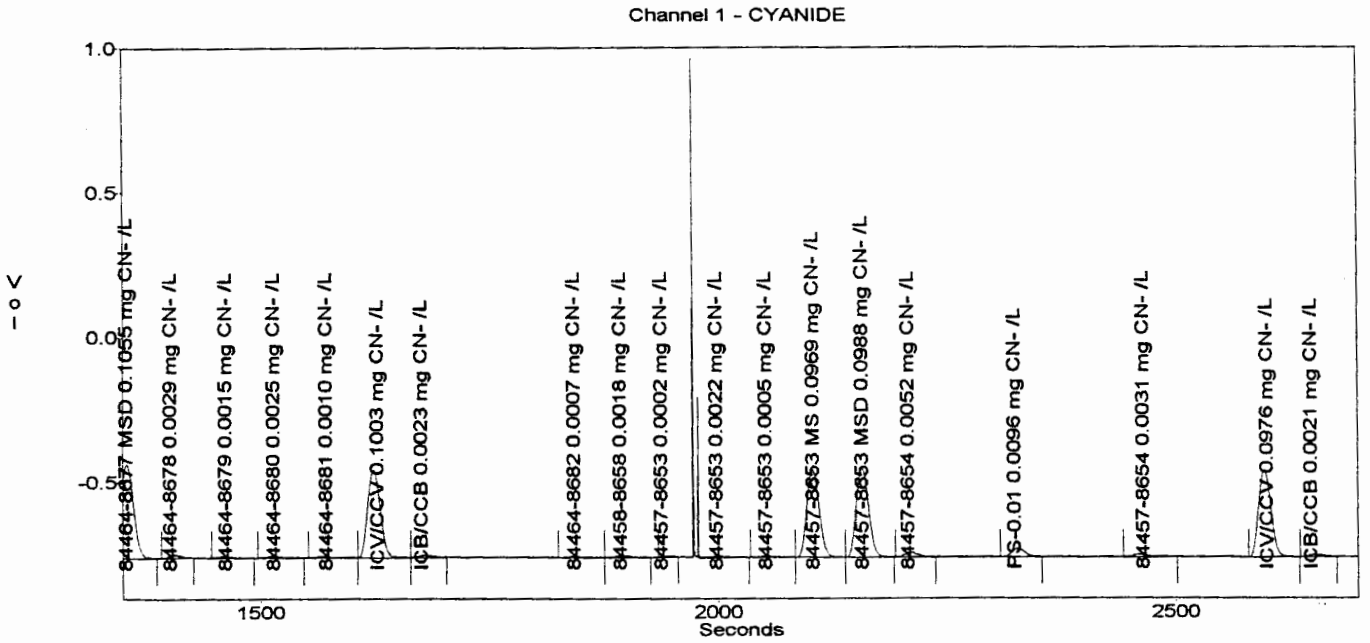
Method Cycle Period:	55.0
Min. Probe in Wash Period:	15.0
Probe in Sample Period:	24.0

*** Prep Sequence Not Enabled ***

VALVE TIMING:

Method Cycle Period:	55.0
Sample Reaches 1st Valve:	18.0
Valve:	On
Load Time:	0.0
Load Period:	19.0
Inject Period:	36.0





Multi-Channel Table
Type: Calibration Standards
Channel Range: 1 to 8 -- Cup Range: 1 to 50

Cup	Sample ID	# of Reps	CYANIDE (uv-s)	Man Dil Factor	Auto Dil Factor	Weight	Unit
1	CAL STD 0.5 ppm	1	22206636.0000	1.0	1.00	1.00000	g
2	CAL STD 0.2ppm	1	9467352.0000	1.0	1.00	1.00000	g
3	CAL STD 0.1ppm	1	4715937.5000	1.0	1.00	1.00000	g
4	CAL STD 0.050pp	1	2393603.2500	1.0	1.00	1.00000	g
5	CAL STD 0.010pp	1	533163.5625	1.0	1.00	1.00000	g
6	CAL STD 0.005pp	1	328140.2188	1.0	1.00	1.00000	g
7	CAL STD 0.000(b	1	53174.1211	1.0	1.00	1.00000	g

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 – Cup Range: 1 to 50

Cup	Sample ID	# of Reps		CYANIDE (mg CN- /L)		Man Dil Factor	Auto Dil Factor	Weight	Unit
2	PB	1		0.0009	ND	1.0	1.00	1.00000	g
3	PS-0.01	1		0.0089	RR	1.0	1.00	1.00000	g
3	PS-0.01	1		0.0096	96%	1.0	1.00	1.00000	g
4	PS-0.2	1		0.2073	104%	1.0	1.00	1.00000	g
7	84464-8677 MSD	1		0.1055	106%	1.0	1.00	1.00000	g
8	84464-8678	1	ND	0.0029		1.0	1.00	1.00000	g
9	84464-8679	1		0.0015		1.0	1.00	1.00000	g
10	84464-8680	1		0.0025		1.0	1.00	1.00000	g
11	84464-8681	1		0.0010		1.0	1.00	1.00000	g
12	84464-8682	1		0.0007		1.0	1.00	1.00000	g
13	84458-8658	1		0.0018		1.0	1.00	1.00000	g
16	84457-8653 MSD	1		0.0988	99%	1.0	1.00	1.00000	g
17	84457-8654	1	RR	0.0052		1.0	1.00	1.00000	g
17	84457-8654	1	ND	0.0031		1.0	1.00	1.00000	g

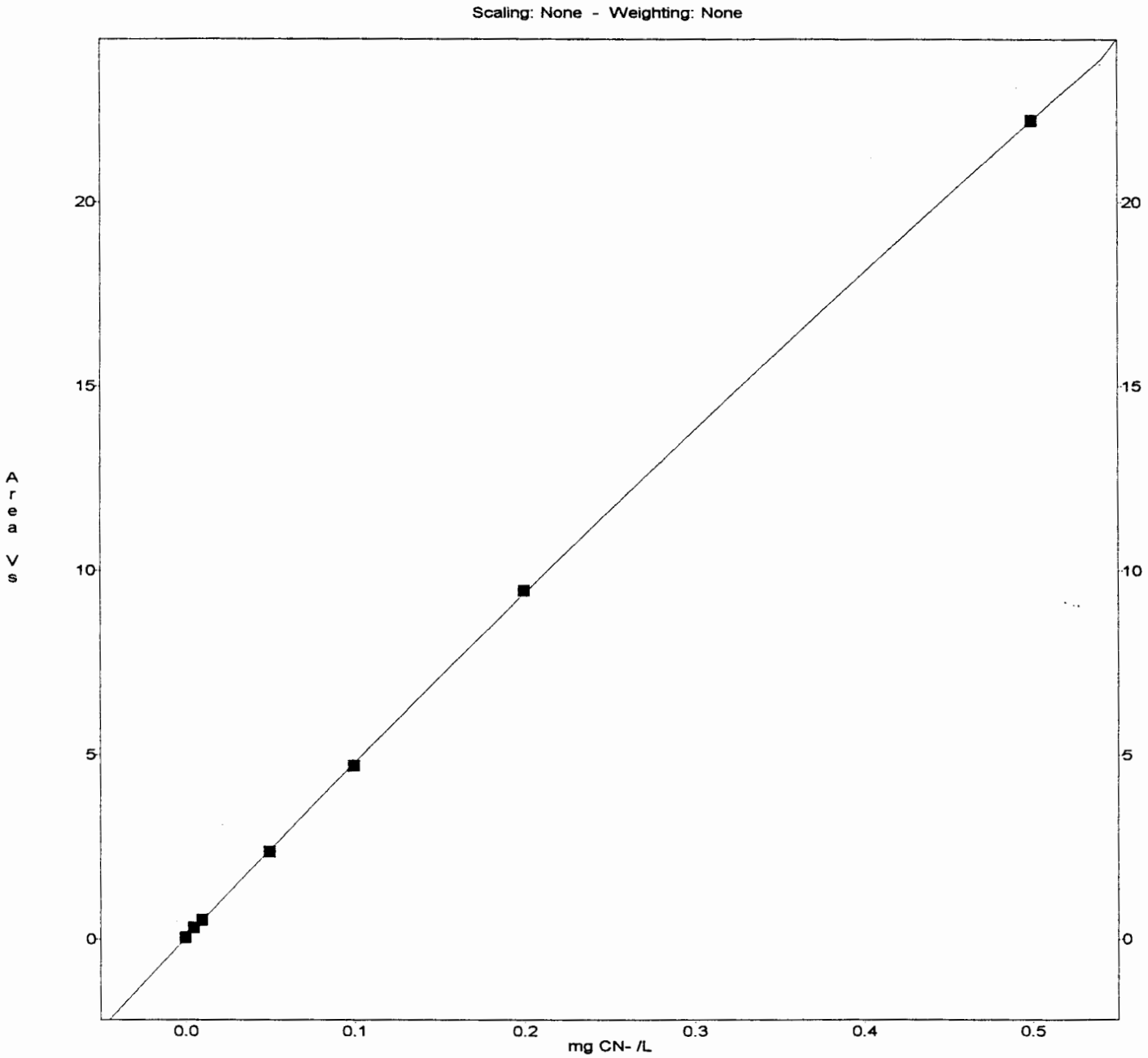
Multi-Channel Table
Type: DQM
Channel Range: 1 to 8 – Cup Range: 1 to 50

Cup	Sample ID	Sample Type	# of Reps	CYANIDE (mg CN- /L)	Man Dil Factor	Auto Dil Factor	Weight	Unit
1	LLC	RelChkStd	1	0.0055	1.0	1.00	1.00000	g
		Known Concentration:		0.0050				
		% Difference:		10.2126				
6	84464-8677	Dup1	1	0.0039	1.0	1.00	1.00000	g
5	84464-8677	Unspiked	1	ND 0.0005	1.0	1.00	1.00000	g
5	84464-8677	Dup2	1	0.0006	1.0	1.00	1.00000	g
		% RPD from Dup1:		19.8591				
6	84464-8677 MS	Spiked	1	0.1017	1.0	1.00	1.00000	g
		Spike Level:		0.1000				
		% Spike Recovery:		~~101.1658~~ 102%				
14	84457-8653	Dup1	1	0.0002	1.0	1.00	1.00000	g
14	84457-8653	Unspiked	1	ND 0.0022	1.0	1.00	1.00000	g
14	84457-8653	Dup2	1	0.0005	1.0	1.00	1.00000	g
		% RPD from Dup1:		~~123.1604~~ 0% ALL ND				
15	ICV/CCV	RelChkStd	1	0.0957	1.0	1.00	1.00000	g
		Known Concentration:		0.1000				
		% Difference:		-4.3448				
15	ICV/CCV	RelChkStd	1	0.1003	1.0	1.00	1.00000	g
		Known Concentration:		0.1000				
		% Difference:		0.2521				
15	84457-8653 MS	Spiked	1	0.0969	1.0	1.00	1.00000	g
		Spike Level:		0.1000				
		% Spike Recovery:		~~94.7840~~ 97%				
15	ICV/CCV	RelChkStd	1	0.0976	1.0	1.00	1.00000	g
		Known Concentration:		0.1000				
		% Difference:		-2.3955				
16	ICB/CCB	Blank	1	0.0019	1.0	1.00	1.00000	g
16	ICB/CCB	Blank	1	0.0023	1.0	1.00	1.00000	g
16	ICB/CCB	Blank	1	0.0021	1.0	1.00	1.00000	g

CYANIDE

\	Area	mg CN- /L	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Replic STD	Replic % RSD	Residual 2nd Poly
	22206636	0.500	22206636					0.0	0.0	0.0
2	9467352	0.200	9467352					0.0	0.0	-0.8
3	4715938	0.100	4715938					0.0	0.0	1.9
4	2393603	0.050	2393603					0.0	0.0	2.2
5	533164	0.010	533164					0.0	0.0	-2.2
6	328140	0.005	328140					0.0	0.0	-20.0
7	53174	0.000	53174					0.0	0.0	

2nd Order Poly
Conc = 9.096e-017 Area² + 2.052e-008 Area - 7.419e-004
r = 1.0000



ted: Tuesday, September 29, 1998 - 11:22 AM

CT & E Environmental Services, Inc. - Anatech Division

INORGANIC QC SUMMARY

ANALYTE:	CN	RUN DATE:	10/2/98
INSTRUMENT:	LACHATE QC 8000	REPORT DATE:	10/2/98
PREP BATCH:	1	ANALYTICAL BATCH:	CN10028A
DIGESTION DATE:	10/1/98-102/98	METHOD:	335.2
ANALYST:	LS	REVIEW:	
UNITS:	mg/L	PROJECT #:	84492

BLANKS	CONC.	LOD	COMMENT
PREP BLANK	ND	0.005	
ICB	ND	0.005	
CCB1	ND	0.005	
CCB2	ND	0.005	
CCB3	ND	0.005	
CCB4	ND	0.005	
CCB5			

ICV/CCV	TRUE	FOUND	% RECOVERY	COMMENT
ICV	0.1	0.0968	96.8	
CCV1	0.1	0.1017	101.7	
CCV2	0.1	0.098	98.0	
CCV3	0.1	0.0999	99.9	
CCV4	0.1	0.0992	99.20	
CCV5				

SPIKES	SPK ADDED	SAMPLE CONC	SPK CONC	% RECOVERY	C
LCS	0.2		0.1937	96.85	
MS (84495-8755)	0.1	ND	0.093	93.00	
MSD (84495-8755)	0.1	ND	0.1	100.00	
Spike Sample: non-NMED client			RPD=	7.25	

ASPK	SPK ADDED	SAMPLE CONC	ASPK CONC	% RECOVERY	C

MSA	SAMPLE ID:				
ADDITION 1:	ADDITION 2:	ADDITION 3:	ADDITION 4:	CORRELATION COEFFICIENT	VALUE

CYANIDE

mtds 335.1, 335.2, 7.3.3.2

OPERATOR: Leann
ACQ. TIME: Oct 2, 1998 12:33:14
DATA FILENAME: C:\OMNION\DATA\CN10028A.FDT
METHOD FILENAME: C:\OMNION\METHODS\CN-.MET
TRAY FILENAME: C:\OMNION\TRAYS\CNWRK.TRA

19

Method - Ch. 1 (CYANIDE)

METHOD DESCRIPTION:
Created: Jul 25, 1995 11:07:06
Modified: Sep 29, 1998 11:27:33
CYANIDE

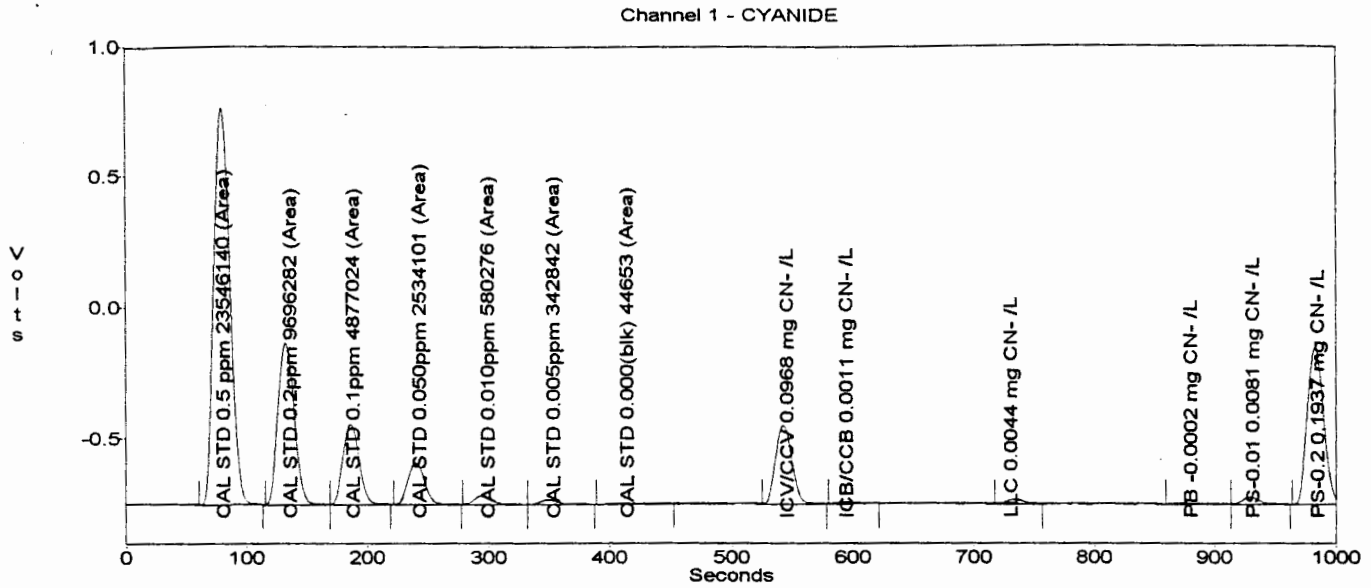
ANALYTE DATA:
Analyte Name: CYANIDE
Concentration Units: mg CN- /L
Chemistry: Direct
Inject to Peak Start (s): 30.0
Peak Base Width (s): 30.000
% Width Tolerance: 100.000
Threshold: 250.000
Autodilution Trigger: On
QuikChem Method: 10-204-00-1-A

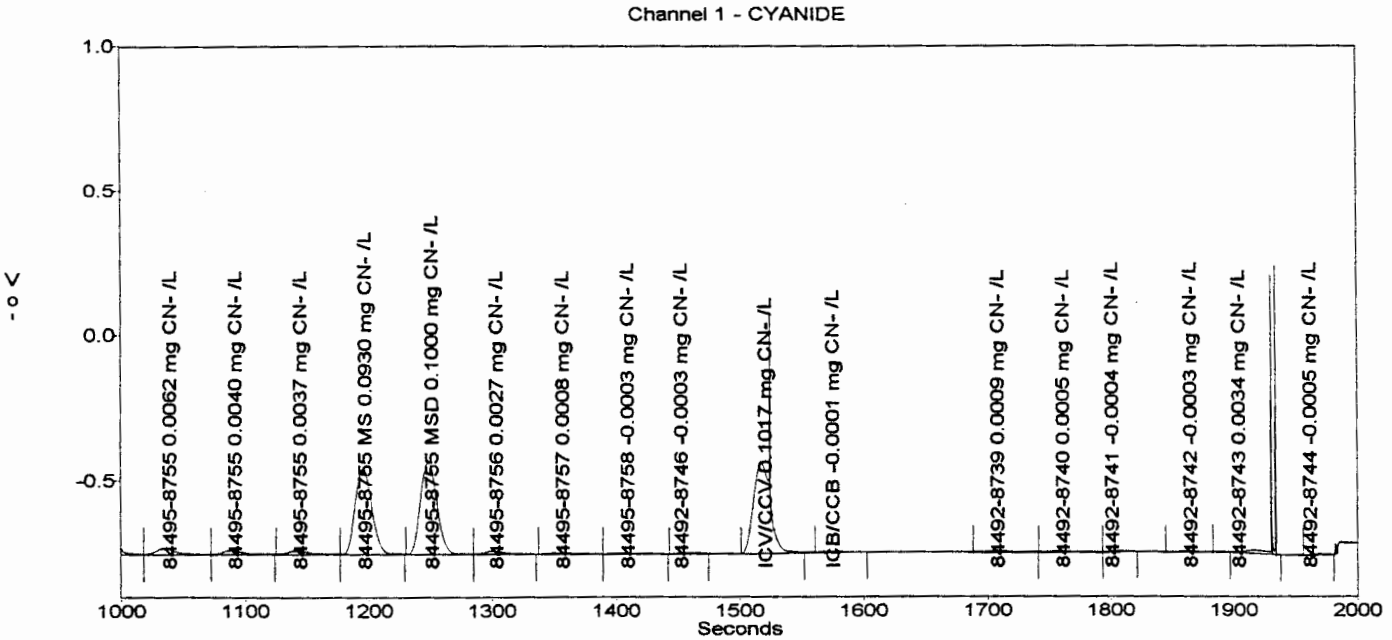
CALIBRATION DATA:
Levels:
1 : 0.500 2 : 0.200 3 : 0.100 4 : 0.050
5 : 0.010 6 : 0.005 7 : 0.000
alibration Rep Handling: Average
alibration Fit Type: 2nd Order Poly
orce Though Zero: No
Weighting Method: None
Concentration Scaling: None

SAMPLER TIMING:
Method Cycle Period: 55.0
Min. Probe in Wash Period: 15.0
Probe in Sample Period: 24.0

*** Prep Sequence Not Enabled ***

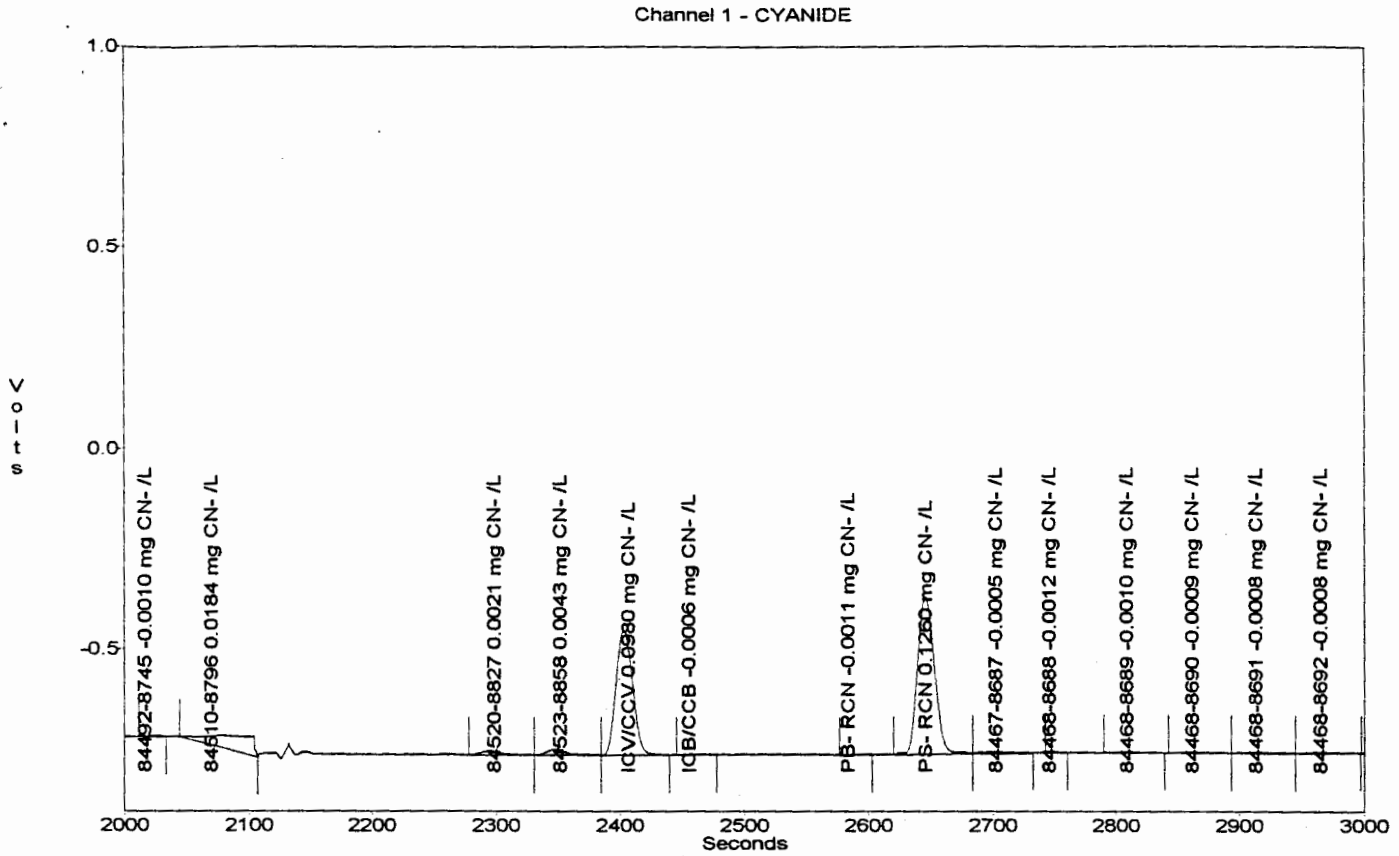
VALVE TIMING:
Method Cycle Period: 55.0
Sample Reaches 1st Valve: 18.0
Valve: On
Load Time: 0.0
Load Period: 19.0
Inject Period: 36.0

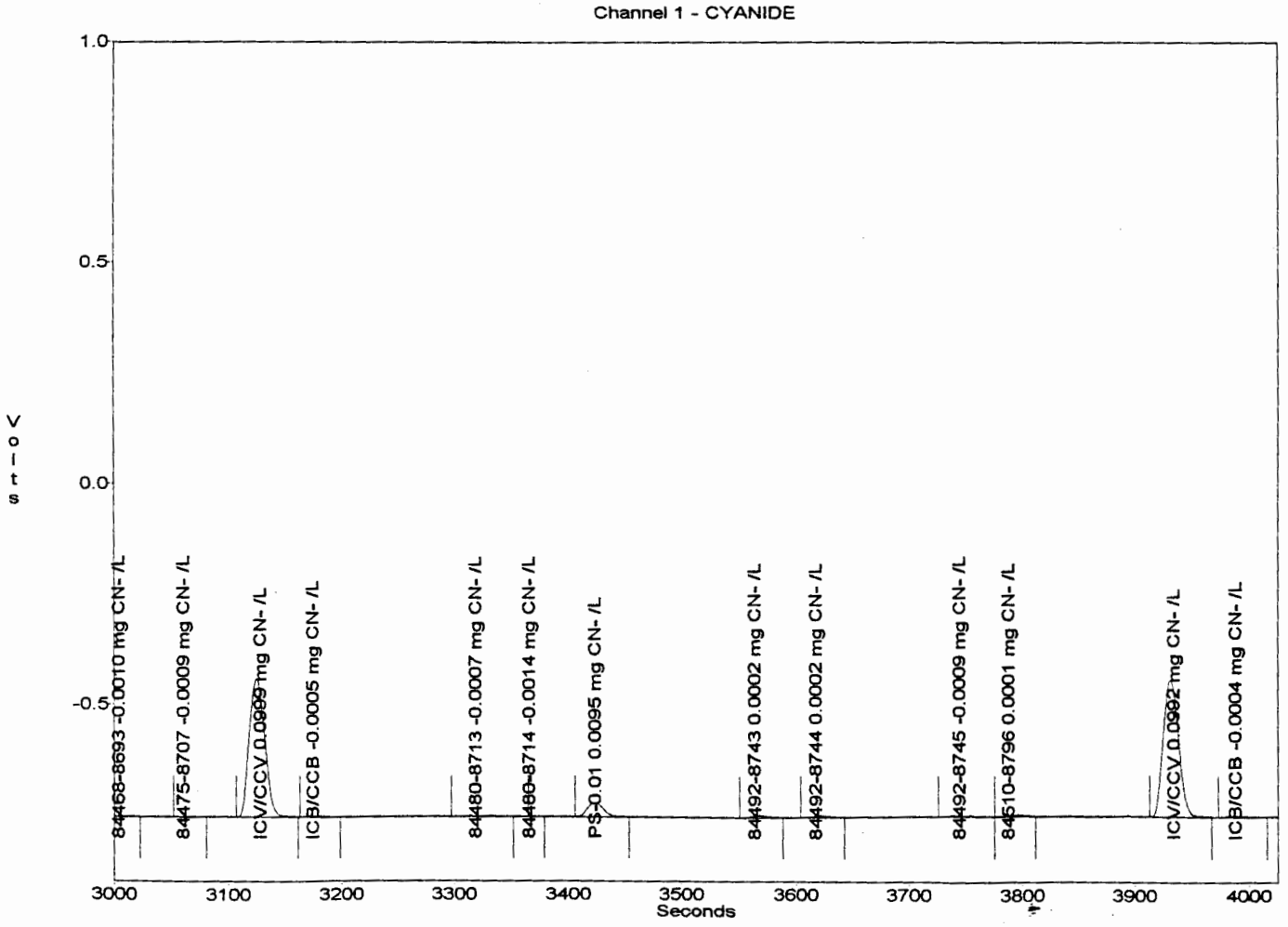




Multi-Channel Table
Type: Calibration Standards
Channel Range: 1 to 8 -- Cup Range: 1 to 50

Cup	Sample ID	# of Reps	CYANIDE (uv-s)	Man Dil Factor	Auto Dil Factor	Weight	Unit
1	CAL STD 0.5 ppm	1	23546140.0000	1.0	1.00	1.00000	g
2	CAL STD 0.2ppm	1	9696282.0000	1.0	1.00	1.00000	g
3	CAL STD 0.1ppm	1	4877023.5000	1.0	1.00	1.00000	g
4	CAL STD 0.050pp	1	2534101.2500	1.0	1.00	1.00000	g
5	CAL STD 0.010pp	1	580276.3750	1.0	1.00	1.00000	g
6	CAL STD 0.005pp	1	342842.0000	1.0	1.00	1.00000	g
7	CAL STD 0.000(b	1	44652.9727	1.0	1.00	1.00000	g


Channel 1 - CYANIDE
Volts
1.0
0.5
0.0
-0.5
84492-8745 -0.0010 mg CN- /L
84510-8796 0.0184 mg CN- /L
84520-8827 0.0021 mg CN- /L
84523-8858 0.0043 mg CN- /L
ICV/CCV 0.0980 mg CN- /L
ICB/CCB -0.0006 mg CN- /L
PS- RCN -0.0011 mg CN- /L
PS- RCN 0.1260 mg CN- /L
84467-8687 -0.0005 mg CN- /L
84468-8688 -0.0012 mg CN- /L
84468-8689 -0.0010 mg CN- /L
84468-8690 -0.0009 mg CN- /L
84468-8691 -0.0008 mg CN- /L
84468-8692 -0.0008 mg CN- /L
2000
2100
2200
2300
2400
2500
2600
2700
2800
2900
3000
Seconds


Channel 1 - CYANIDE
Volts
1.0
0.5
0.0
-0.5
84468-8693 -0.0010 mg CN- /L
84475-8707 -0.0009 mg CN- /L
ICV/CCV 0.0989 mg CN- /L
ICB/CCB -0.0005 mg CN- /L
84480-8713 -0.0007 mg CN- /L
84480-8714 -0.0014 mg CN- /L
PS-0.01 0.0095 mg CN- /L
84492-8743 0.0002 mg CN- /L
84492-8744 0.0002 mg CN- /L
84492-8745 -0.0009 mg CN- /L
84510-8796 0.0001 mg CN- /L
ICV/CCV 0.0992 mg CN- /L
ICB/CCB -0.0004 mg CN- /L
3000
3100
3200
3300
3400
3500
3600
3700
3800
3900
4000
Seconds

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 – Cup Range: 1 to 50

Cup	Sample ID	# of Reps		CYANIDE (mg CN- /L)		Man Dil Factor	Auto Dil Factor	Weight	Unit
	PB	1		-0.0002	ND	1.0	1.00	1.00000	g
	PS-0.01	1		0.0081	RR	1.0	1.00	1.00000	g
3	PS-0.01	1		0.0095	95%	1.0	1.00	1.00000	g
4	PS-0.2	1		0.1937	97%	1.0	1.00	1.00000	g
7	84495-8755 MSD	1		0.1000	100%	1.0	1.00	1.00000	g
8	84495-8756	1	ND	0.0027		1.0	1.00	1.00000	g
9	84495-8757	1		0.0008		1.0	1.00	1.00000	g
10	84495-8758	1		-0.0003		1.0	1.00	1.00000	g
11	84492-8746	1		-0.0003		1.0	1.00	1.00000	g
12	84492-8739	1		0.0009		1.0	1.00	1.00000	g
13	84492-8740	1		0.0005		1.0	1.00	1.00000	g
14	84492-8741	1		-0.0004		1.0	1.00	1.00000	g
15	84492-8742	1		-0.0003		1.0	1.00	1.00000	g
16	84492-8743	1		0.0034		1.0	1.00	1.00000	g
16	84492-8743	1		0.0002		1.0	1.00	1.00000	g
17	84492-8744	1		-0.0005		1.0	1.00	1.00000	g
17	84492-8744	1		0.0002		1.0	1.00	1.00000	g
18	84492-8745	1		-0.0010		1.0	1.00	1.00000	g
18	84492-8745	1		-0.0009		1.0	1.00	1.00000	g
19	84510-8796	1	RR	0.0184		1.0	1.00	1.00000	g
19	84510-8796	1	ND	0.0001		1.0	1.00	1.00000	g
20	84520-8827	1		0.0021		1.0	1.00	1.00000	g
21	84523-8858	1		0.0043		1.0	1.00	1.00000	g
22	PB- RCN	1		-0.0011	ND	1.0	1.00	1.00000	g
[illegible]	PS- RCN	1		0.1260	25%	1.0	1.00	1.00000	g
	84467-8687	1	ND	-0.0005		1.0	1.00	1.00000	g
[illegible]	84468-8688	1		-0.0012		1.0	1.00	1.00000	g
[illegible]	84468-8689	1		-0.0010		1.0	1.00	1.00000	g
27	84468-8690	1		-0.0009		1.0	1.00	1.00000	g
28	84468-8691	1		-0.0008		1.0	1.00	1.00000	g
29	84468-8692	1		-0.0008		1.0	1.00	1.00000	g
30	84468-8693	1		-0.0010		1.0	1.00	1.00000	g
31	84475-8707	1		-0.0009		1.0	1.00	1.00000	g
32	84480-8713	1		-0.0007		1.0	1.00	1.00000	g
33	84480-8714	1		-0.0014		1.0	1.00	1.00000	g

Multi-Channel Table
Type: DQM
Channel Range: 1 to 8 – Cup Range: 1 to 50

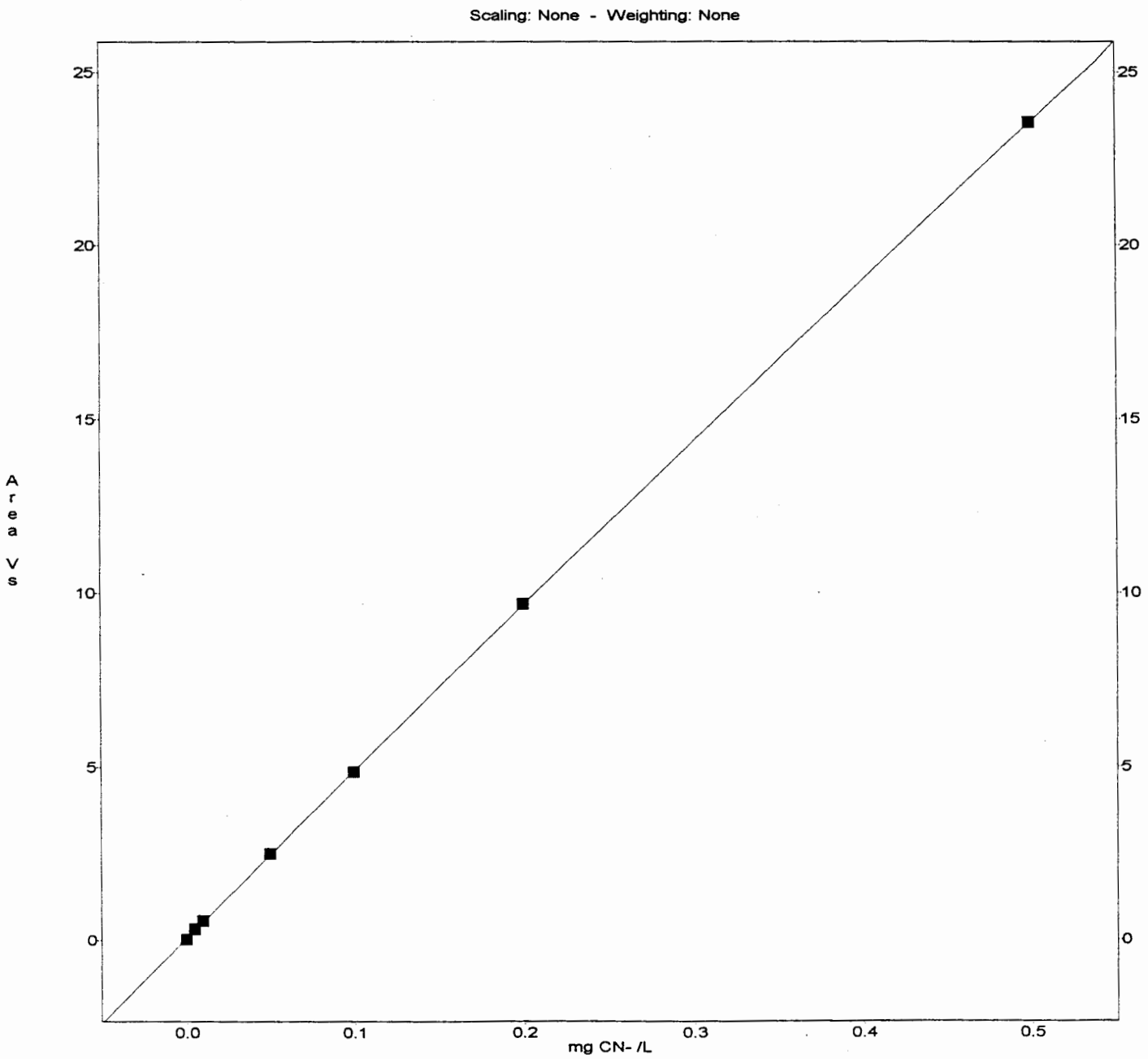
Cup	Sample ID	Sample Type	# of Reps	CYANIDE (mg CN- /L)	Man Dil Factor	Auto Dil Factor	Weight	Unit
	LLC	RelChkStd	1	0.0044	1.0	1.00	1.00000	g
		Known Concentration:		0.0050				
		% Difference:		-12.9322				
5	84495-8755	Dup1	1	~~0.0002~~	1.0	1.00	1.00000	g
5	84495-8755	Unspiked	1	ND 0.0040	1.0	1.00	1.00000	g
5	84495-8755	Dup2	1	0.0037	1.0	1.00	1.00000	g
		% RPD from Dup1:		8.5671				
6	84495-8755 MS	Spiked	1	0.0930	1.0	1.00	1.00000	g
		Spike Level:		0.1000				
		% Spike Recovery:		~~88.9770~~ 93%				
15	ICV/CCV	RelChkStd	1	0.0968	1.0	1.00	1.00000	g
		Known Concentration:		0.1000				
		% Difference:		-3.1773				
15	ICV/CCV	RelChkStd	1	0.1017	1.0	1.00	1.00000	g
		Known Concentration:		0.1000				
		% Difference:		1.6836				
15	ICV/CCV	RelChkStd	1	0.0980	1.0	1.00	1.00000	g
		Known Concentration:		0.1000				
		% Difference:		-2.0488				
15	ICV/CCV	RelChkStd	1	0.0999	1.0	1.00	1.00000	g
		Known Concentration:		0.1000				
		% Difference:		-0.0765				
15	ICV/CCV	RelChkStd	1	0.0992	1.0	1.00	1.00000	g
		Known Concentration:		0.1000				
		% Difference:		-0.7775				
16	ICB/CCB	Blank	1	ND 0.0011	1.0	1.00	1.00000	g
16	ICB/CCB	Blank	1	-0.0001	1.0	1.00	1.00000	g
16	ICB/CCB	Blank	1	-0.0006	1.0	1.00	1.00000	g
16	ICB/CCB	Blank	1	-0.0005	1.0	1.00	1.00000	g
16	ICB/CCB	Blank	1	-0.0004	1.0	1.00	1.00000	g

CYANIDE

	Area	mg CN- /L	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Replic STD	Replic % RSD	Residual 2nd Poly
1	23546140	0.500	23546140					0.0	0.0	0.0
2	9696282	0.200	9696282					0.0	0.0	-0.2
3	4877024	0.100	4877024					0.0	0.0	0.9
4	2534101	0.050	2534101					0.0	0.0	-1.1
5	580276	0.010	580276					0.0	0.0	-2.9
6	342842	0.005	342842					0.0	0.0	-8.4
7	44653	0.000	44653					0.0	0.0	

LVI

2nd Order Poly
Conc = 3.446e-017 Area² + 2.049e-008 Area - 1.608e-003
r = 1.0000



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TKN

CT & E Environmental Services, Inc. - Anatech Division

INORGANIC QC SUMMARY

ANALYTE:	TKN	RUN DATE:	9/29/98
INSTRUMENT:	Lachate QC 8000	REPORT DATE:	11/12/98
PREP BATCH:	1	ANALYTICAL BATCH:	Kj09298A
DIGESTION DATE:	9/28/98	METHOD:	351.2
ANALYST:	LS	REVIEW:	
UNITS:	mg/L	PROJECT #:	84464

BLANKS	CONC.	LOD	COMMENT
PREP BLANK	ND	0.1	
ICB	ND	0.1	
CCB1	ND	0.1	
CCB2			
CCB3			
CCB4			
CCB5			

ICV/CCV	TRUE	FOUND	% RECOVERY	COMMENT
ICV	5.0	5.2849	105.7	
CCV1	5.0	5.2568	105.1	
CCV2				
CCV3				
CCV4				
CCV5				

SPIKES	SPK ADDED	SAMPLE CONC	SPK CONC	% RECOVERY	C
LCS	5.00		4.85	96.97	
MS (84426-8559)	5.00	0.38	4.99	92.24	
MSD (84426-8559)	5.00	0.38	5.20	96.28	
Spiked Sample ID: non-NMED sample			RPD=	4.29	

ASPK	SPK ADDED	SAMPLE CONC	ASPK CONC	% RECOVERY	C

MSA	SAMPLE ID:				
ADDITION 1:	ADDITION 2:	ADDITION 3:	ADDITION 4:	CORRELATION COEFFICIENT	VALUE

OPERATOR: Leann
ACQ. TIME: Sep 29, 1998 8:48:33
DATA FILENAME: C:\OMNION\DATA\KJ09298A.FDT
METHOD FILENAME: C:\OMNION\METHODS\TKN.MET
TRAY FILENAME: C:\OMNION\TRAYS\TKNWORKG.TRA

TRAY DESCRIPTION:
Created: Sep 29, 1998 8:33:19
Modified: Sep 29, 1998 9:26:52
TKN
DATA DESCRIPTION:
Created: Sep 29, 1998 8:48:33
Modified: Sep 29, 1998 8:48:33

Method - Ch. 1 (TKN)

METHOD DESCRIPTION:
Created: Nov 2, 1995 9:30:35
Modified: Sep 23, 1998 12:52:43
TKN

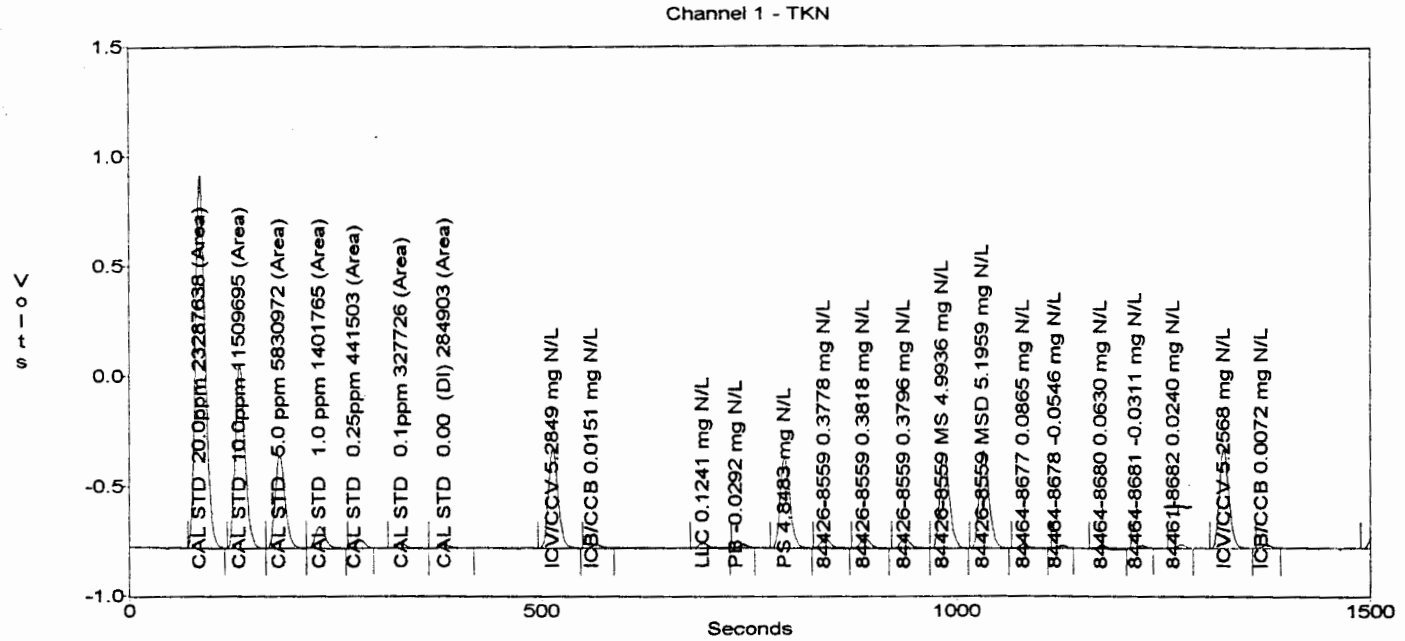
ANALYTE DATA:
Analyte Name: TKN
Concentration Units: mg N/L
Chemistry: Direct
Inject to Peak Start (s): 40.0
Peak Base Width (s): 25.000
% Width Tolerance: 100.000
Threshold: 2000.000
Autodilution Trigger: Off
QuikChem Method: 10-107-06-2-E

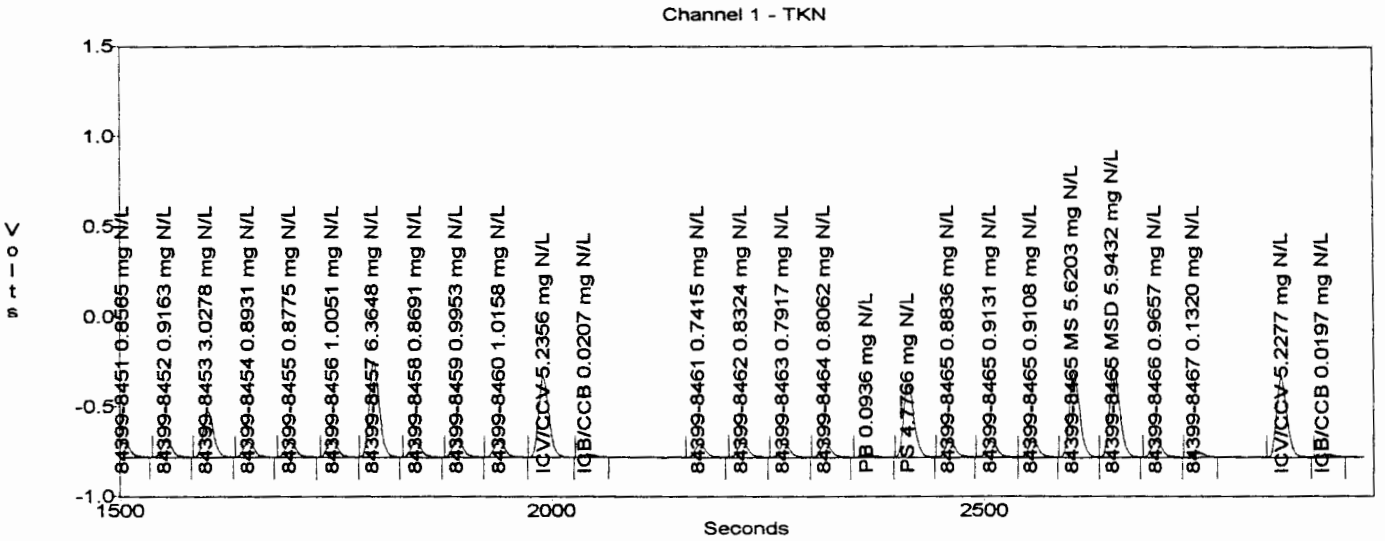
CALIBRATION DATA:
Levels:
1 : 20.000 2 : 10.000 3 : 5.000 4 : 1.000
5 : 0.250 6 : 0.100 7 : 0.000
Calibration Rep Handling: Average
Calibration Fit Type: 1st Order Poly
Force Though Zero: No
Weighting Method: 1/X
Concentration Scaling: None

SAMPLER TIMING:
Method Cycle Period: 50.0
Min. Probe in Wash Period: 14.0
Probe in Sample Period: 20.0

*** Prep Sequence Not Enabled ***

VALVE TIMING:
Method Cycle Period: 50.0
Sample Reaches 1st Valve: 18.0
Valve: On
Load Time: 0.0
Load Period: 14.0
Inject Period: 36.0





Multi-Channel Table
Type: Calibration Standards
Channel Range: 1 to 8 -- Cup Range: 1 to 8

Cup	Sample ID	Sampling Time	Rep #	TKN (uv-s)	Man Dil Factor	Auto Dil Factor	Weight	Unit
1	CAL STD 20.0pp	08:48:35	1	23287638.0000	1.0	1.00	1.00000	g
2	CAL STD 10.0pp	08:49:24	1	11509695.0000	1.0	1.00	1.00000	g
3	CAL STD 5.0 p	08:50:12	1	5830971.5000	1.0	1.00	1.00000	g
4	CAL STD 1.0 p	08:51:01	1	1401764.8750	1.0	1.00	1.00000	g
5	CAL STD 0.25p	08:51:50	1	441503.0938	1.0	1.00	1.00000	g
6	CAL STD 0.1pp	08:52:40	1	327726.0000	1.0	1.00	1.00000	g
7	CAL STD 0.00	08:53:31	1	284902.7500	1.0	1.00	1.00000	g

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 1 to 50

Cup	Sample ID	# of Reps		TKN (mg N/L)		Man Dil Factor	Auto Dil Factor	Weight	Unit
2	PB	1		-0.0292	ND	1.0	1.00	1.00000	g
	PS	1		4.8483	97%	1.0	1.00	1.00000	g
6	84426-8559 MSD	1		5.1959	96%	1.0	1.00	1.00000	g
7	84464-8677	1	ND	0.0865		1.0	1.00	1.00000	g
8	84464-8678	1	ND	-0.0546		1.0	1.00	1.00000	g
9	84464-8680	1	ND	0.0630		1.0	1.00	1.00000	g
10	84464-8681	1	ND	-0.0311		1.0	1.00	1.00000	g
11	84464-8682	1	ND	0.0240		1.0	1.00	1.00000	g
12	84399-8451	1	0.9	0.8565		1.0	1.00	1.00000	g
13	84399-8452	1	0.9	0.9163		1.0	1.00	1.00000	g
14	84399-8453	1	3.0	3.0278		1.0	1.00	1.00000	g
15	84399-8454	1	0.9	0.8931		1.0	1.00	1.00000	g
16	84399-8455	1	0.9	0.8775		1.0	1.00	1.00000	g
17	84399-8456	1	1.0	1.0051		1.0	1.00	1.00000	g
18	84399-8457	1	6.4	6.3648		1.0	1.00	1.00000	g
19	84399-8458	1	0.9	0.8691		1.0	1.00	1.00000	g
20	84399-8459	1	1.0	0.9953		1.0	1.00	1.00000	g
21	84399-8460	1	1.0	1.0158		1.0	1.00	1.00000	g
22	84399-8461	1	0.7	0.7415		1.0	1.00	1.00000	g
23	84399-8462	1	0.8	0.8324		1.0	1.00	1.00000	g
24	84399-8463	1	0.8	0.7917		1.0	1.00	1.00000	g
25	84399-8464	1	0.8	0.8062		1.0	1.00	1.00000	g
26	PB	1		0.0936	ND	1.0	1.00	1.00000	g
27	PS	1		4.7766	96%	1.0	1.00	1.00000	g
30	84399-8465 MSD	1		5.9432	101%	1.0	1.00	1.00000	g
	84399-8466	1	1.0	0.9657		1.0	1.00	1.00000	g
4	84399-8467	1	0.1	0.1320		1.0	1.00	1.00000	g

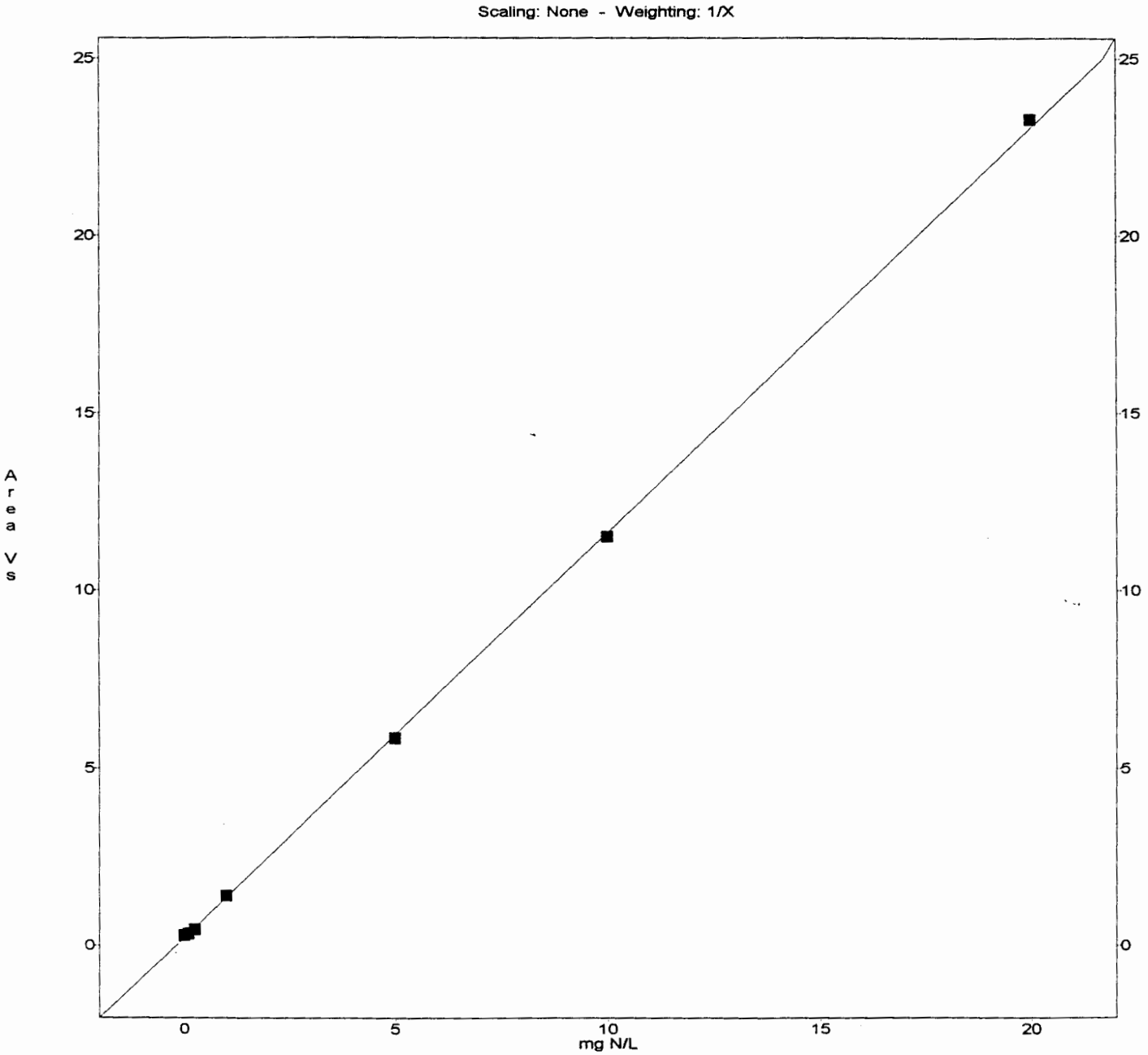
Multi-Channel Table
Type: DQM
Channel Range: 1 to 8 -- Cup Range: 1 to 50

Cup	Sample ID	Sample Type	# of Reps	TKN (mg N/L)	Man Dil Factor	Auto Dil Factor	Weight	Unit
	LLC	RelChkStd	1	0.1241	1.0	1.00	1.00000	g
		Known Concentration:		0.1000				
		% Difference:		24.1128				
4	84426-8559	Dup1	1	0.3778	1.0	1.00	1.00000	g
4	84426-8559	Unspiked	1	0.4 0.3818	1.0	1.00	1.00000	g
4	84426-8559	Dup2	1	0.3796	1.0	1.00	1.00000	g
		% RPD from Dup1:		0.5685				
5	84426-8559 MS	Spiked	1	4.9936	1.0	1.00	1.00000	g
		Spike Level:		~~2.5000~~ 5				
		% Spike Recovery:		~~184.4747~~ 92%				
15	ICV/CCV	RelChkStd	1	5.2849	1.0	1.00	1.00000	g
		Known Concentration:		5.0000				
		% Difference:		5.6981				
15	ICV/CCV	RelChkStd	1	5.2568	1.0	1.00	1.00000	g
		Known Concentration:		5.0000				
		% Difference:		5.1361				
15	ICV/CCV	RelChkStd	1	5.2356	1.0	1.00	1.00000	g
		Known Concentration:		5.0000				
		% Difference:		4.7130				
15	ICV/CCV	RelChkStd	1	5.2277	1.0	1.00	1.00000	g
		Known Concentration:		5.0000				
		% Difference:		4.5535				
16	ICB/CCB	Blank	1	0.0151 ND	1.0	1.00	1.00000	g
16	ICB/CCB	Blank	1	0.0072	1.0	1.00	1.00000	g
16	ICB/CCB	Blank	1	0.0207	1.0	1.00	1.00000	g
16	ICB/CCB	Blank	1	0.0197	1.0	1.00	1.00000	g
28	84399-8465	Dup1	1	0.8836	1.0	1.00	1.00000	g
28	84399-8465	Unspiked	1	0.9 0.9131	1.0	1.00	1.00000	g
28	84399-8465	Dup2	1	0.9108	1.0	1.00	1.00000	g
		% RPD from Dup1:		0.2485				
	84399-8465 MS	Spiked	1	5.6203	1.0	1.00	1.00000	g
		Spike Level:		~~2.5000~~ 5				
		% Spike Recovery:		~~188.2907~~ 94%				

TKN

	Area	mg N/L	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Replic STD	Replic % RSD	Residual 1st Poly
	23287638	20.00	23287638					0.0	0.0	-1.0
2	11509695	10.00	11509695					0.0	0.0	1.2
3	5830972	5.00	5830972					0.0	0.0	1.8
4	1401765	1.00	1401765					0.0	0.0	-2.9
5	441503	0.25	441503					0.0	0.0	25.1
6	327726	0.10	327726					0.0	0.0	12.3
7	284903	0.00	284903					0.0	0.0	

1st Order Poly
Conc = 8.761e-007 Area - 1.995e-001
r = 0.9999



:ed: Tuesday, September 29, 1998 - 09:41 AM

CT & E Environmental Services, Inc. - Anatech Division

INORGANIC QC SUMMARY

ANALYTE:	TKN	RUN DATE:	10/2/98
INSTRUMENT:	Lachate QC 8000	REPORT DATE:	11/12/98
PREP BATCH:	1	ANALYTICAL BATCH:	Kj10028A
DIGESTION DATE:	9/28/98	METHOD:	351.2
ANALYST:	LS	REVIEW:	
UNITS:	mg/L	PROJECT #:	84464

BLANKS	CONC.	LOD	COMMENT
PREP BLANK	ND	0.1	
ICB	ND	0.1	
CCB1	ND	0.1	
CCB2	ND	0.1	
CCB3			
CCB4			
CCB5			

ICV/CCV	TRUE	FOUND	% RECOVERY	COMMENT
ICV	5.0	5.3537	107.1	
CCV1	5.0	5.4256	108.5	
CCV2	5.0	4.9843	99.7	
CCV3				
CCV4				
CCV5				

SPIKES	SPK ADDED	SAMPLE CONC	SPK CONC	% RECOVERY	C
LCS	5.00		4.80	95.91	
MS (84464-8679)	5.00	0.27	5.11	96.76	
MSD (84464-8679)	5.00	0.27	5.03	95.35	
Spiked Sample ID: SP-5-98			RPD=	1.47	

ASPK	SPK ADDED	SAMPLE CONC	ASPK CONC	% RECOVERY	C

MSA	SAMPLE ID:				
ADDITION 1:	ADDITION 2:	ADDITION 3:	ADDITION 4:	CORRELATION COEFFICIENT	VALUE

OPERATOR: Leann
ACQ. TIME: Oct 2, 1998 9:45:02
DATA FILENAME: C:\OMNION\DATA\KJ10028A.FDT
METHOD FILENAME: C:\OMNION\METHODS\TKN.MET
TRAY FILENAME: C:\OMNION\TRAYS\TKNWORKG.TRA

TRAY DESCRIPTION:
Created: Oct 2, 1998 9:14:01
Modified: Oct 2, 1998 10:32:27
TKN
DATA DESCRIPTION:
Created: Oct 2, 1998 9:45:02
Modified: Oct 2, 1998 9:45:02

B

Method - Ch. 1 (TKN)

METHOD DESCRIPTION:
Created: Nov 2, 1995 9:30:35
Modified: Sep 29, 1998 9:46:19
TKN

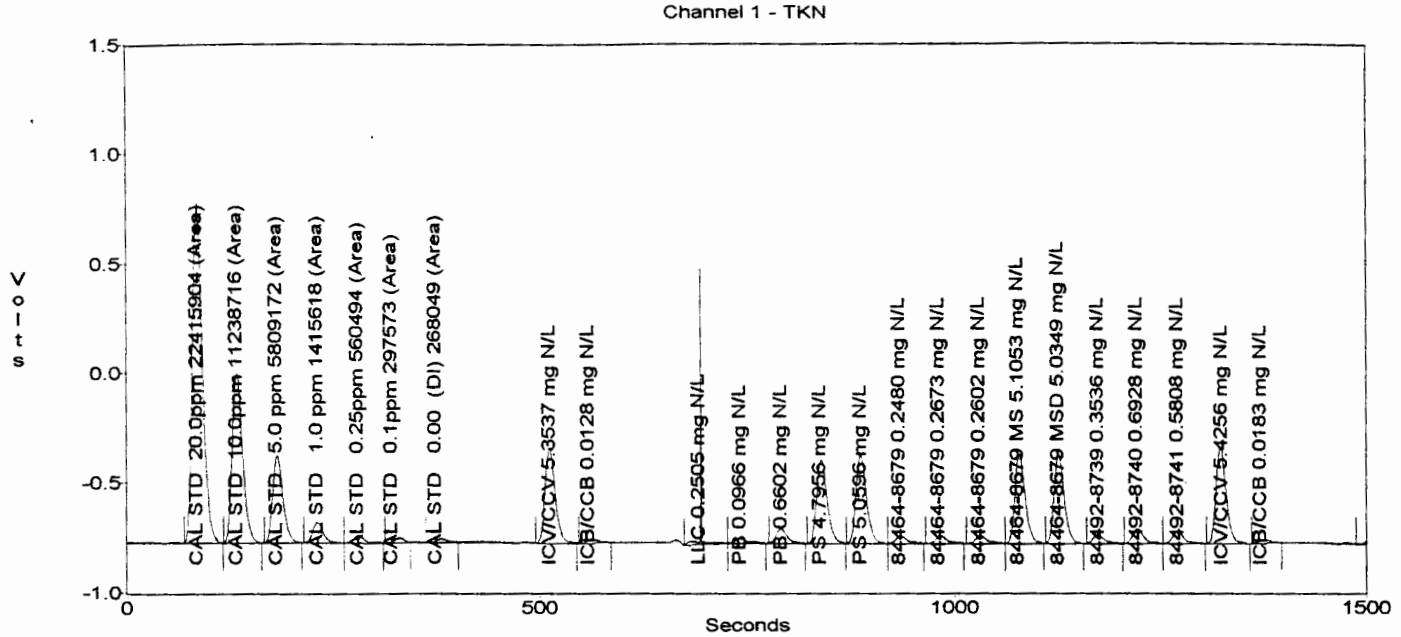
ANALYTE DATA:
Analyte Name: TKN
Concentration Units: mg N/L
Chemistry: Direct
Inject to Peak Start (s): 40.0
Peak Base Width (s): 25.000
% Width Tolerance: 100.000
Threshold: 2000.000
Autodilution Trigger: Off
QuikChem Method: 10-107-06-2-E

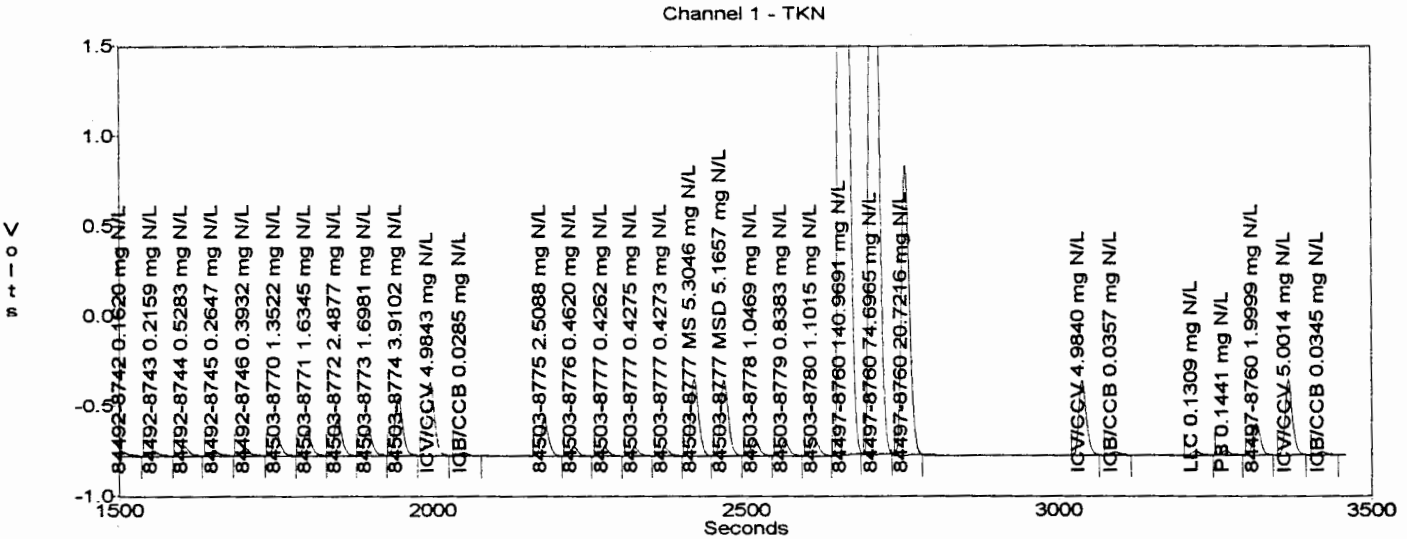
CALIBRATION DATA:
Levels:
1 : 20.000 2 : 10.000 3 : 5.000 4 : 1.000
5 : 0.250 6 : 0.100 7 : 0.000
Calibration Rep Handling: Average
Calibration Fit Type: 1st Order Poly
Force Though Zero: No
Weighting Method: 1/X
Concentration Scaling: None

SAMPLER TIMING:
Method Cycle Period: 50.0
Min. Probe in Wash Period: 14.0
Probe in Sample Period: 20.0

*** Prep Sequence Not Enabled ***

VALVE TIMING:
Method Cycle Period: 50.0
Sample Reaches 1st Valve: 18.0
Valve: On
Load Time: 0.0
Load Period: 14.0
Inject Period: 36.0





Multi-Channel Table
Type: Calibration Standards
Channel Range: 1 to 8 -- Cup Range: 1 to 8

Cup	Sample ID	Sampling Time	Rep #	TKN (uv-s)	Man Dil Factor	Auto Dil Factor	Weight	Unit
1	CAL STD 20.0pp	09:45:04	1	22415904.0000	1.0	1.00	1.00000	g
2	CAL STD 10.0pp	09:45:52	1	11238716.0000	1.0	1.00	1.00000	g
3	CAL STD 5.0 p	09:46:41	1	5809172.0000	1.0	1.00	1.00000	g
4	CAL STD 1.0 p	09:47:29	1	1415618.0000	1.0	1.00	1.00000	g
5	CAL STD 0.25p	09:48:19	1	560494.1875	1.0	1.00	1.00000	g
6	CAL STD 0.1pp	09:49:08	1	297573.2188	1.0	1.00	1.00000	g
7	CAL STD 0.00	09:49:59	1	268048.5938	1.0	1.00	1.00000	g

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 1 to 50

Cup	Sample ID	# of Reps		TKN (mg N/L)		Man Dil Factor	Auto Dil Factor	Weight	Unit	
	LLC	1		0.1309	131%	1.0	1.00	1.00000	g	
	PB	1		0.0966	ND	1.0	1.00	1.00000	g	
~~3~~	~~PB~~	~~1~~		~~0.6602~~		~~1.0~~	~~1.00~~	~~1.00000~~	~~g~~	DON'T NEED
~~3~~	~~PB~~	~~1~~		~~0.1441~~		~~1.0~~	~~1.00~~	~~1.00000~~	~~g~~	DON'T NEED
4	PS	1		4.7956	96%	1.0	1.00	1.00000	g	
~~5~~	~~PS~~	~~1~~		~~5.0596~~		~~1.0~~	~~1.00~~	~~1.00000~~	~~g~~	
8	84464-8679 MSD	1		5.0349	95%	1.0	1.00	1.00000	g	
9	84492-8739	1	0.4	0.3536		1.0	1.00	1.00000	g	
10	84492-8740	1	0.7	0.6928		1.0	1.00	1.00000	g	
11	84492-8741	1	0.6	0.5808		1.0	1.00	1.00000	g	
12	84492-8742	1	0.2	0.1620		1.0	1.00	1.00000	g	
13	84492-8743	1	0.2	0.2159		1.0	1.00	1.00000	g	
14	84492-8744	1	0.5	0.5283		1.0	1.00	1.00000	g	
15	84492-8745	1	0.3	0.2647		1.0	1.00	1.00000	g	
16	84492-8746	1	0.4	0.3932		1.0	1.00	1.00000	g	
17	84503-8770	1	1.4	1.3522		1.0	1.00	1.00000	g	
18	84503-8771	1	1.6	1.6345		1.0	1.00	1.00000	g	
19	84503-8772	1	2.5	2.4877		1.0	1.00	1.00000	g	
20	84503-8773	1	1.7	1.6981		1.0	1.00	1.00000	g	
21	84503-8774	1	3.9	3.9102		1.0	1.00	1.00000	g	
22	84503-8775	1	2.5	2.5088		1.0	1.00	1.00000	g	
23	84503-8776	1	0.5	0.4620		1.0	1.00	1.00000	g	
~~26~~	~~84503-8777 MSD~~	~~1~~		~~5.1657~~		~~1.0~~	~~1.00~~	~~1.00000~~	~~g~~	
27	84503-8778	1	1.0	1.0469		1.0	1.00	1.00000	g	
28	84503-8779	1	0.8	0.8383		1.0	1.00	1.00000	g	
	84503-8780	1	1.1	1.1015		1.0	1.00	1.00000	g	
J	84497-8760	1		281.9381		2.0	1.00	1.00000	g	
31	84497-8760	1		373.4825		5.0	1.00	1.00000	g	
32	84497-8760	1		414.4327		20.0	1.00	1.00000	g	
33	84497-8760	1	400	399.9767		200.0	1.00	1.00000	g	

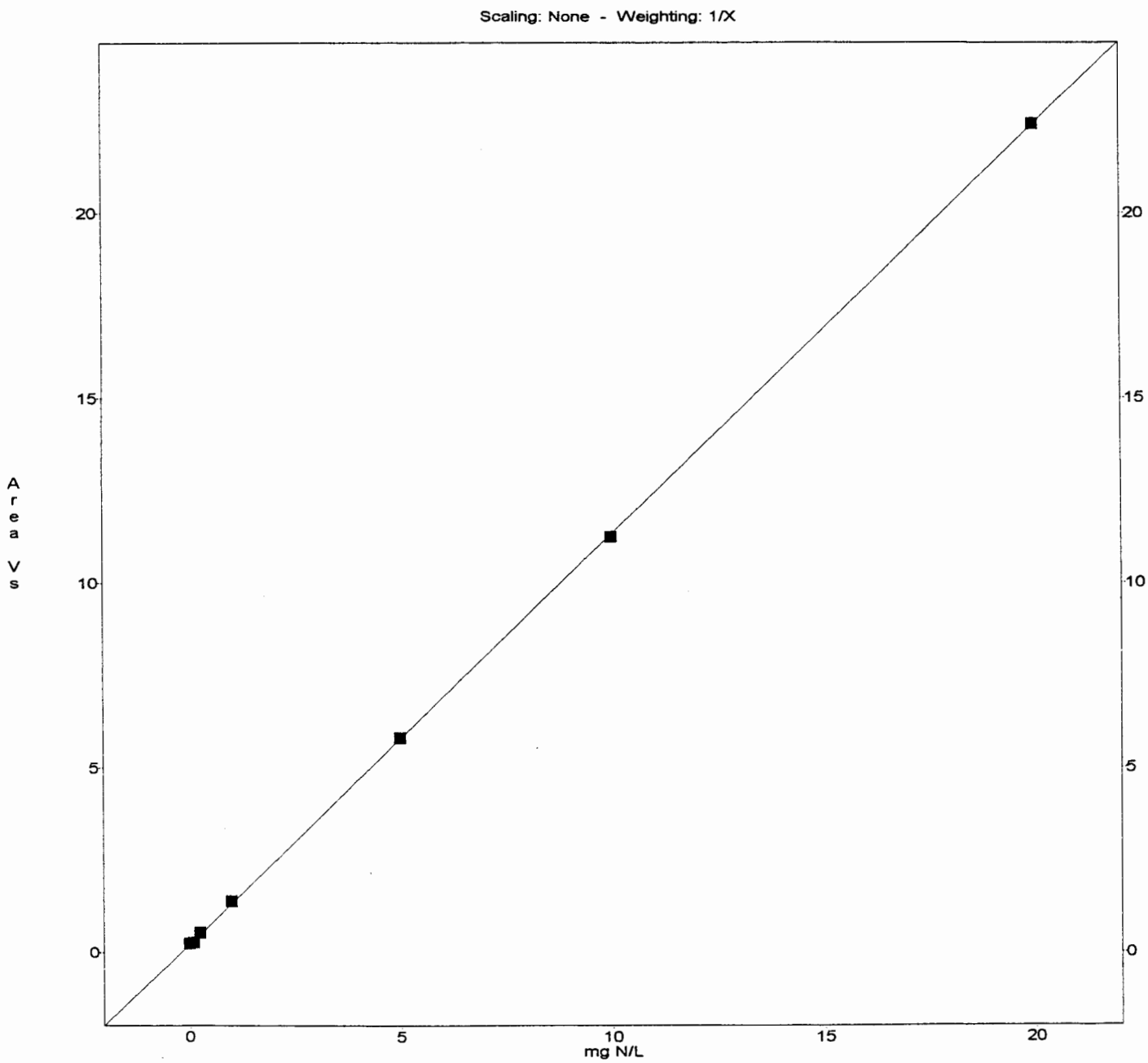
Multi-Channel Table
Type: DQM
Channel Range: 1 to 8 -- Cup Range: 1 to 50

Cup	Sample ID	Sample Type	# of Reps		TKN (mg N/L)	Man Dil Factor	Auto Dil Factor	Weight	Unit
1	LLC	RelChkStd	1		0.2505	1.0	1.00	1.00000	g
		Known Concentration:			0.1000				
		% Difference:			150.5031	— RR FORGOT TO LOAD STD			
6	84464-8679	Dup1	1		0.2480	1.0	1.00	1.00000	g
6	84464-8679	Unspiked	1	0.3	0.2673	1.0	1.00	1.00000	g
6	84464-8679	Dup2	1		0.2602	1.0	1.00	1.00000	g
		% RPD from Dup1:			2.6945				
7	84464-8679 MS	Spiked	1		5.1053	1.0	1.00	1.00000	g
		Spike Level:			~~2.5000~~ 5				
		% Spike Recovery:			~~193.5176~~ 97%				
15	ICV/CCV	RelChkStd	1		5.3537	1.0	1.00	1.00000	g
		Known Concentration:			5.0000				
		% Difference:			7.0743 –				
15	ICV/CCV	RelChkStd	1		5.4256	1.0	1.00	1.00000	g
		Known Concentration:			5.0000				
		% Difference:			8.5119 –				
15	ICV/CCV	RelChkStd	1		4.9843	1.0	1.00	1.00000	g
		Known Concentration:			5.0000				
		% Difference:			-0.3134 –				
15	ICV/CCV	RelChkStd	1		4.9840	1.0	1.00	1.00000	g
		Known Concentration:			5.0000				
		% Difference:			-0.3190 –				
15	ICV/CCV	RelChkStd	1		5.0014	1.0	1.00	1.00000	g
		Known Concentration:			5.0000				
		% Difference:			0.0289 –				
16	ICB/CCB	Blank	1		0.0128 ND	1.0	1.00	1.00000	g
16	ICB/CCB	Blank	1		0.0183	1.0	1.00	1.00000	g
16	ICB/CCB	Blank	1		0.0285	1.0	1.00	1.00000	g
16	ICB/CCB	Blank	1		0.0357	1.0	1.00	1.00000	g
16	ICB/CCB	Blank	1		0.0345	1.0	1.00	1.00000	g
	84503-8777	Dup1	1		0.4262	1.0	1.00	1.00000	g
24	84503-8777	Unspiked	1	0.4	0.4275	1.0	1.00	1.00000	g
24	84503-8777	Dup2	1		0.4273	1.0	1.00	1.00000	g
		% RPD from Dup1:			0.0396				
25	84503-8777 MS	Spiked	1		5.3046	1.0	1.00	1.00000	g
		Spike Level:			~~2.5000~~ 5				
		% Spike Recovery:			~~195.0834~~	DON'T NEED			

TKN

	Area	mg N/L	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Replic STD	Replic % RSD	Residual 1st Poly
	22415904	20.00	22415904					0.0	0.0	-0.0
2	11238716	10.00	11238716					0.0	0.0	0.8
3	5809172	5.00	5809172					0.0	0.0	-0.4
4	1415618	1.00	1415618					0.0	0.0	-5.6
5	560494	0.25	560494					0.0	0.0	-13.9
6	297573	0.10	297573					0.0	0.0	52.4
7	268049	0.00	268049					0.0	0.0	

1st Order Poly
Conc = 9.022e-007 Area - 2.209e-001
r = 1.0000



ıted: Friday, October 02, 1998 - 10:46 AM

TOC

ANATECH TOC DATA SHEET

START DATE: 9-29-98 METHOD: 415.1

FINISH DATE: _____ ANALYST: JL UNITS: mg/L LOD: 1

PROJECT NO.	SAMPLE NO.	Vi mL	Vf mL	Dil'n FACT.	RAW RESULT	REPORT RESULT	LOD
ICV (50)					46.60	93%	
ICB (0)					.187	ND	
LLC (1)					1.266	108%	
84445	8619				4.080	4	
	MS				8.911	105%	
	MSD				8.076	88%	
~~84464~~ ~~84446~~	8677				1.724	2	
JL 9-29-98	8678				.787	ND	
	8679				1.191	1	
	8680				.644	ND	
	8681				1.056	1	
	8682				.318	ND	
84503	8770				4.603	5	
CCV					47.97	96%	
CCB					.154	ND	
	8771				5.045	5	
	8772				9.973	10	
	8773				4.082	4	

QC

ICV: _____ TRUE: _____ MEAS.: _____ %RECOV.: _____

CCV1: _____ TRUE: _____ MEAS.: _____ %RECOV: _____

CCV2: _____ TRUE: _____ MEAS.: _____ %RECOV: _____

LIMITS: ICV: +/-10% CCV.SPK: +/-15% ICB.CCB: +/- 1*(L.O.D.)

SAMPLE I.D.	SAMPLE RESULT	SPIKE ADDED	MTX SPK RESULT	% RECOVERY

COMMENTS:

ANATECH TOC DATA SHEET

START DATE: 11/12/98 METHOD: 415.1

FINISH DATE: _____ ANALYST: JL UNITS: mg/L LOD: 1

PROJECT NO.	SAMPLE NO.	Vi mL	Vf ml	Dil'n FACT.	RAW RESULT	REPORT RESULT	LOD
ICV					47.24	94%	
ICB					0.196	ND	
LLC					1.217	102%	
84492	8739				0.701		
	8740				0.504		
	8741				0.262		
	8742				0.309		
	8743				0.408		
	MS				4.884	90%	
	MSD				5.114	95%	
	8746				0.665		
CCV					45.79	92%	
CCB					0.214	ND	

QC

ICV: _____ TRUE: 50 MEAS.: 47.24 %RECOV.: 94%

CCV1: _____ TRUE: 50 MEAS.: 45.79 %RECOV.: 92%

CCV2: _____ TRUE: _____ MEAS.: _____ %RECOV.: _____

LIMITS: ICV: +/-10% CCV.SPK: +/-15% ICB.CCB: +/- 1*(L.O.D.)

SAMPLE I.D.	SAMPLE RESULT	SPIKE ADDED	MTX SPK RESULT	% RECOVERY
84492-8743	(0.408 x 0.9=) 0.3672	5	4.884	90%
84492-8743	0.3672	5	5.114	95%

COMMENTS:

Total Phosphorus

CT & E Environmental Services, Inc. - Anatech Division

INORGANIC QC SUMMARY

ANALYTE:	Total Phosphorus	RUN DATE:	9/30/98
INSTRUMENT:	Lachat	REPORT DATE:	9/30/98
PREP BATCH:	065	RUN #:	TP09308A
DIGESTION DATE:	9/29/98	METHOD:	
ANALYST:	KA/JS	REVIEW:	
UNITS:	mg/L	PROJECT #:	84492

BLANKS	CONC.	LOD	COMMENT
PREP BLANK	0.003	0.004	
ICB	0.0036	0.004	
CCB1	0.0011	0.004	
CCB2	0.0036	0.004	
CCB3	0.0038	0.004	
CCB4	0.0036	0.004	
CCB5	0.0034	0.004	

ICV/CCV	TRUE	FOUND	% RECOVERY	COMMENT
ICV	0.100	0.1070	107	
CCV1	0.100	0.1077	108	
CCV2	0.100	0.1085	108	
CCV3	0.100	0.1080	108	
CCV4	0.100	0.1092	109	
CCV5	0.100	0.1076	108	

SPIKES	SPK ADDED	SAMPLE CONC	SPK CONC	% RECOVERY	C
PREP SPK	0.1	0	0.0823	82	
MS -	0.1	0.0055	0.1023	97	
MSD -	0.1	0.0055	0.1028	97	
			RPD=	0.0	

ASPK	SPK ADDED	SAMPLE CONC	ASPK CONC	% RECOVERY	C

MSA	SAMPLE ID:				
ADDITION 1:	ADDITION 2:	ADDITION 3:	ADDITION 4:	CORRELATION COEFFICIENT	VALUE

OPERATOR:	Kraig
ACQ. TIME:	Sep 30, 1998 10:31:50
DATA FILENAME:	C:\OMNION\DATA\TP09308B.FDT
METHOD FILENAME:	C:\OMNION\METHODS\TP.MET
TRAY FILENAME:	C:\OMNION\TRAYS\TPWORKNG.TRA

TRAY DESCRIPTION:

reated:	Sep 30, 1998 9:33:02
odified:	Sep 30, 1998 12:24:14

, P180COMRK

DATA DESCRIPTION:

Created:	Sep 30, 1998 10:31:50
Modified:	Sep 30, 1998 10:31:50

BATCH #065

Method - Ch. 1 (total phosphorus)

METHOD DESCRIPTION:

Created:	Feb 4, 1998 14:50:26
Modified:	Sep 24, 1998 11:46:01

TP

ANALYTE DATA:

Analyte Name:	total phosphorus
Concentration Units:	mg/L
Chemistry:	Direct
Inject to Peak Start (s):	12.0
k Base Width (s):	22.500
idth Tolerance:	100.000
eshold:	40.000
Autodilution Trigger:	Off
QuikChem Method:	10-115-01-1-F

CALIBRATION DATA:

Levels:

1 : 2.000	2 : 1.000	3 : 0.200	4 : 0.050
5 : 0.020	6 : 0.008	7 : 0.004	8 : 0.000

Calibration Rep Handling:	Average
Calibration Fit Type:	1st Order Poly
Force Though Zero:	No
Weighting Method:	1/X
Concentration Scaling:	None

SAMPLER TIMING:

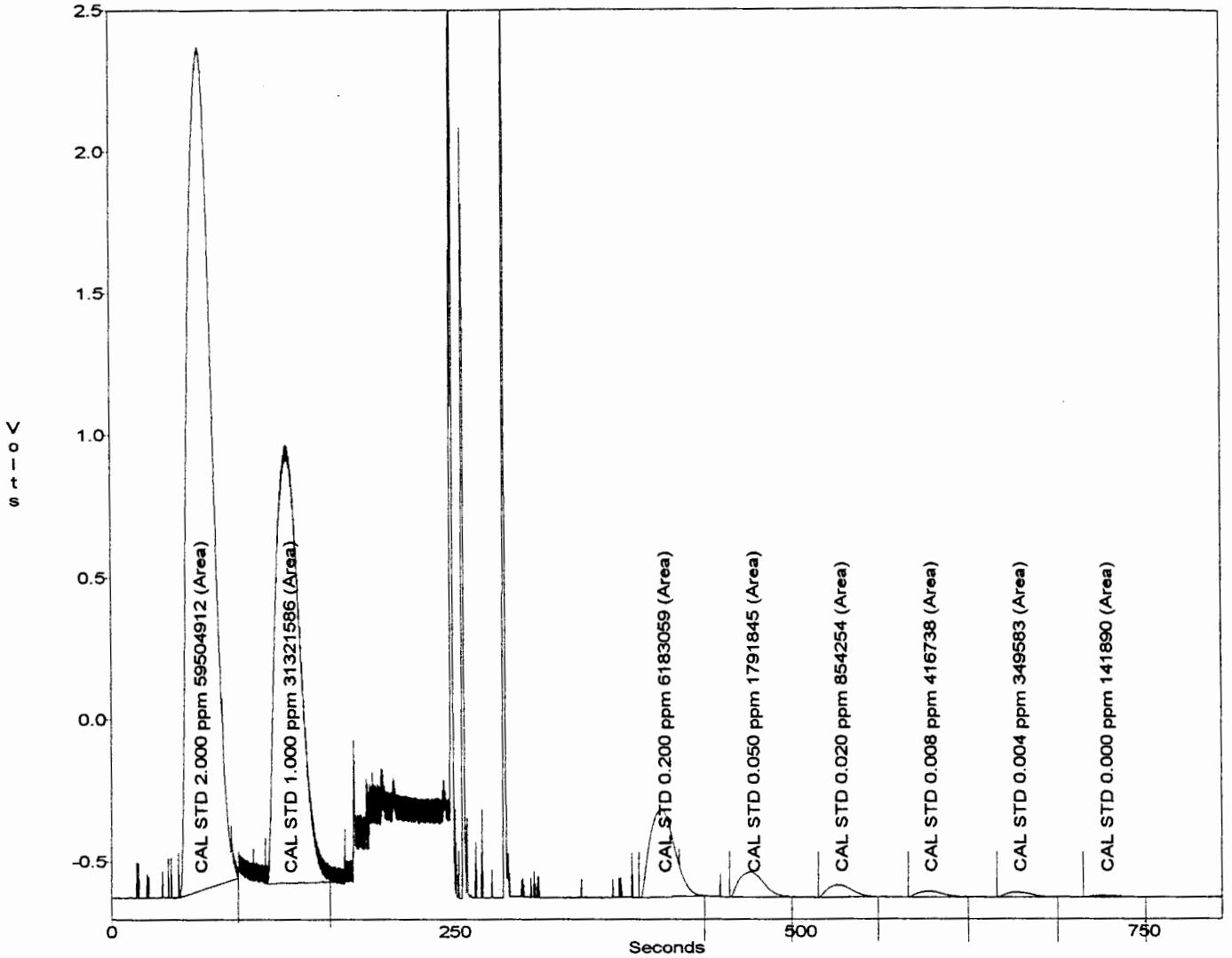
Method Cycle Period:	65.0
Min. Probe in Wash Period:	30.0
Probe in Sample Period:	24.0

*** Prep Sequence Not Enabled ***

VALVE TIMING:

Method Cycle Period:	65.0
Sample Reaches 1st Valve:	20.0
Valve:	On
Load Time:	0.0
Load Period:	17.0
Inject Period:	48.0

Channel 1 - total phosphorus



Sample Information/Results: Ch. 1
total phosphorus (Cup Range: 1 - 9999)

Calibration Standards:

Cup: 1, Sample ID: CAL STD 2.000 ppm, Sample Type: CalStd
Rep 1/1, Level: 1, Peak Area: 59504912.0000 µv-s

Cup: 2, Sample ID: CAL STD 1.000 ppm, Sample Type: CalStd
Rep 1/1, Level: 2, Peak Area: 31321586.0000 µv-s

Cup: 3, Sample ID: CAL STD 0.200 ppm, Sample Type: CalStd
Rep 1/1, Level: 3, Peak Area: 6183058.5000 µv-s

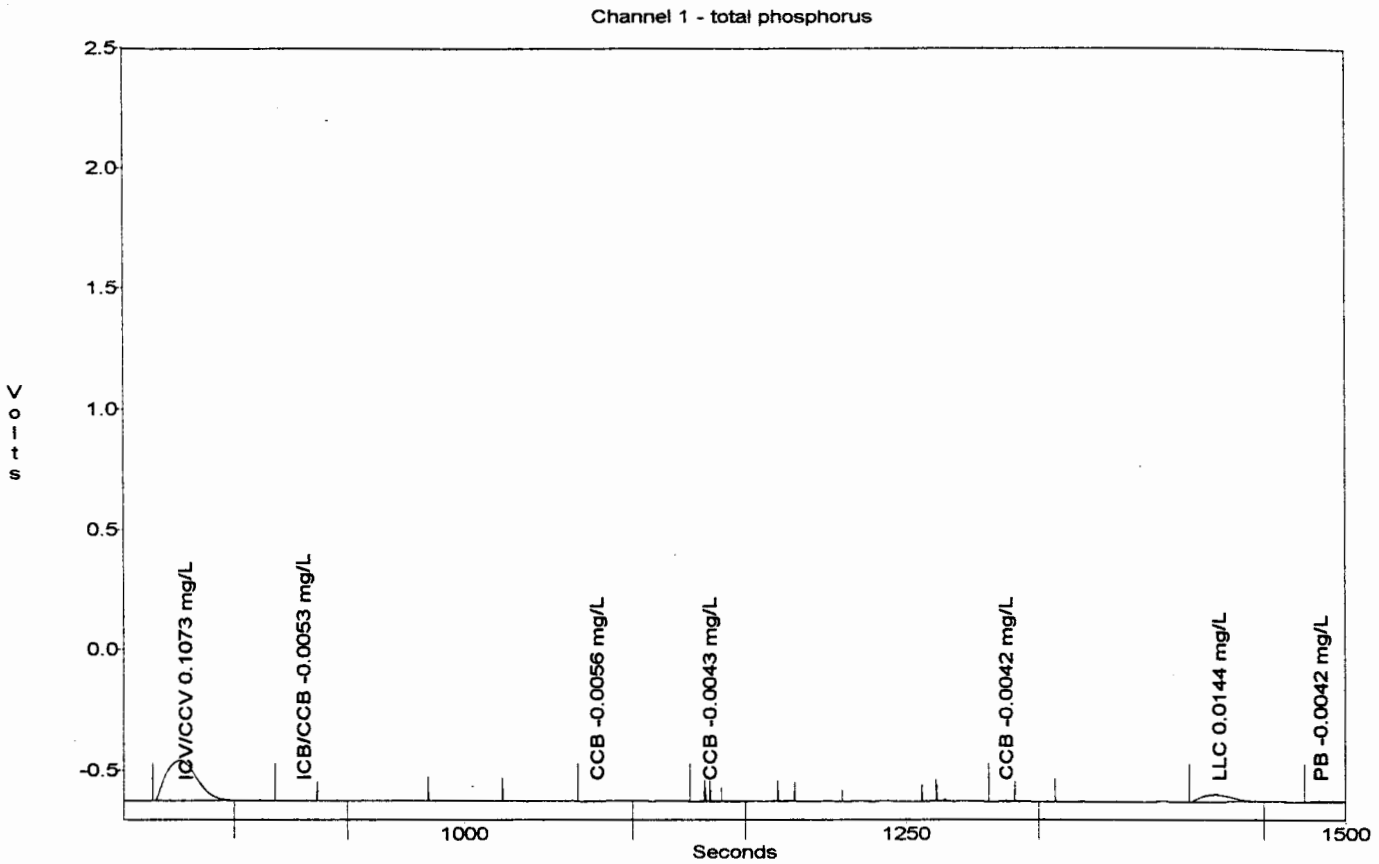
Cup: 4, Sample ID: CAL STD 0.050 ppm, Sample Type: CalStd
Rep 1/1, Level: 4, Peak Area: 1791844.8750 µv-s

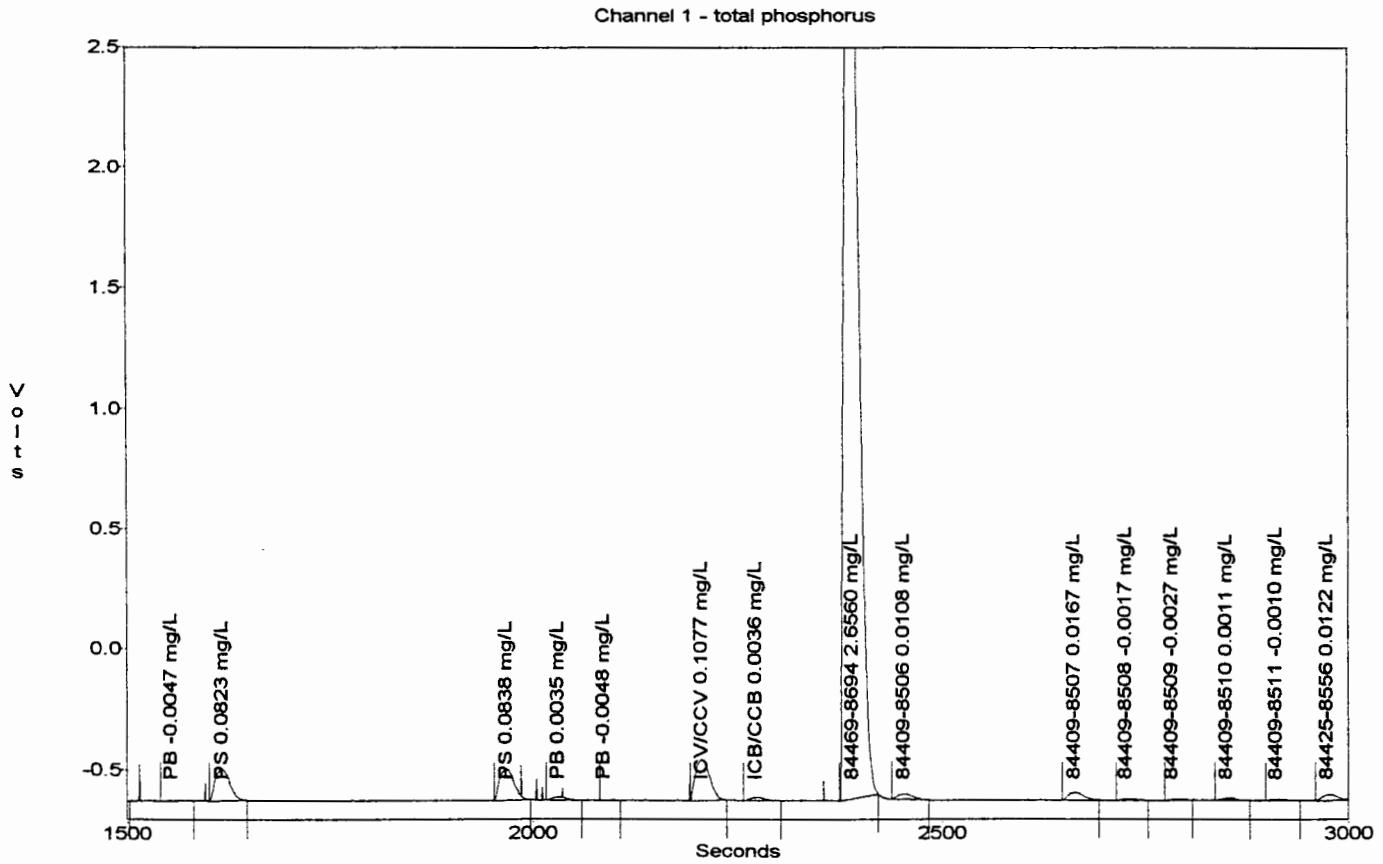
Cup: 5, Sample ID: CAL STD 0.020 ppm, Sample Type: CalStd
Rep 1/1, Level: 5, Peak Area: 854253.6875 µv-s

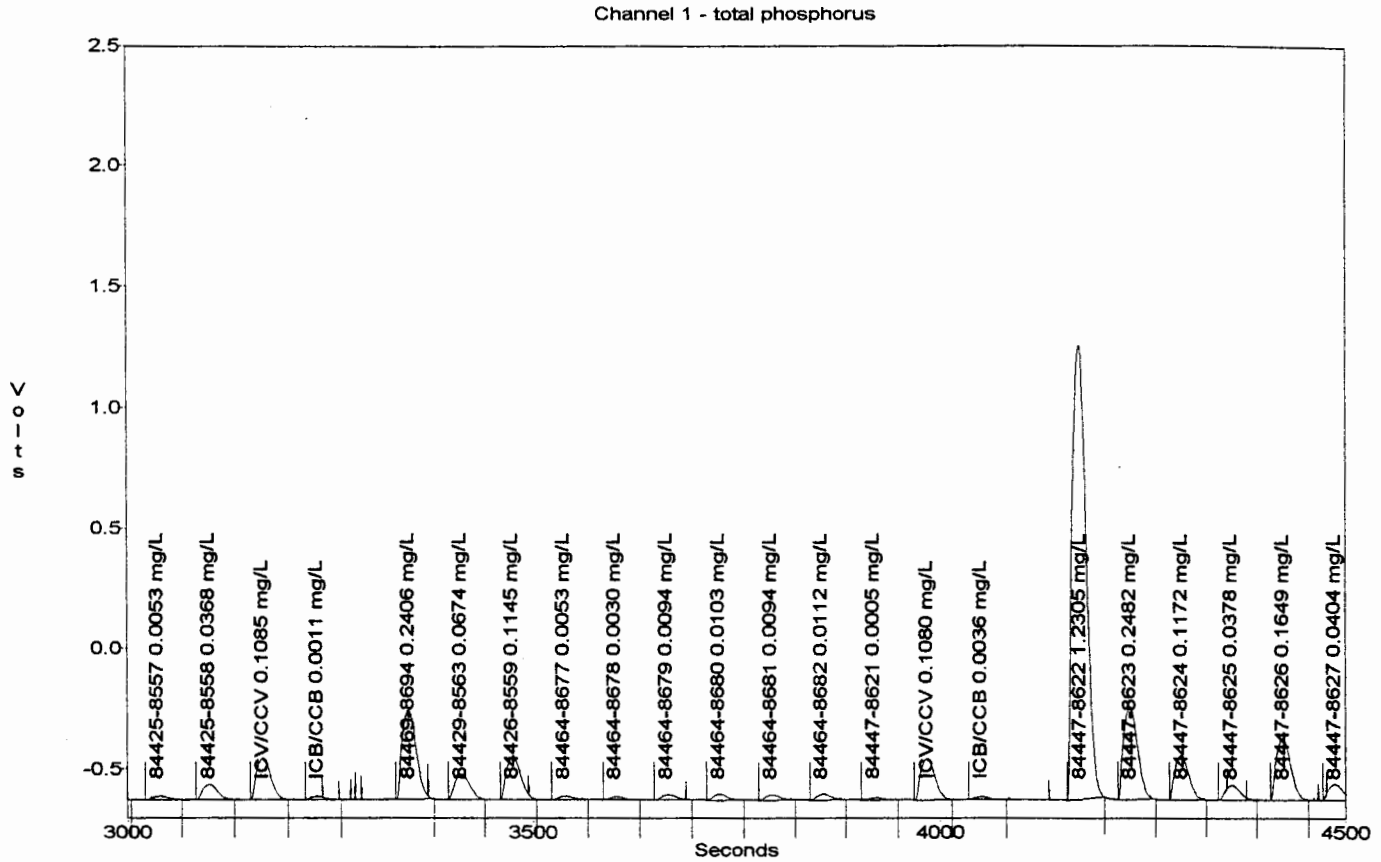
Cup: 6, Sample ID: CAL STD 0.008 ppm, Sample Type: CalStd
Rep 1/1, Level: 6, Peak Area: 416738.3438 µv-s

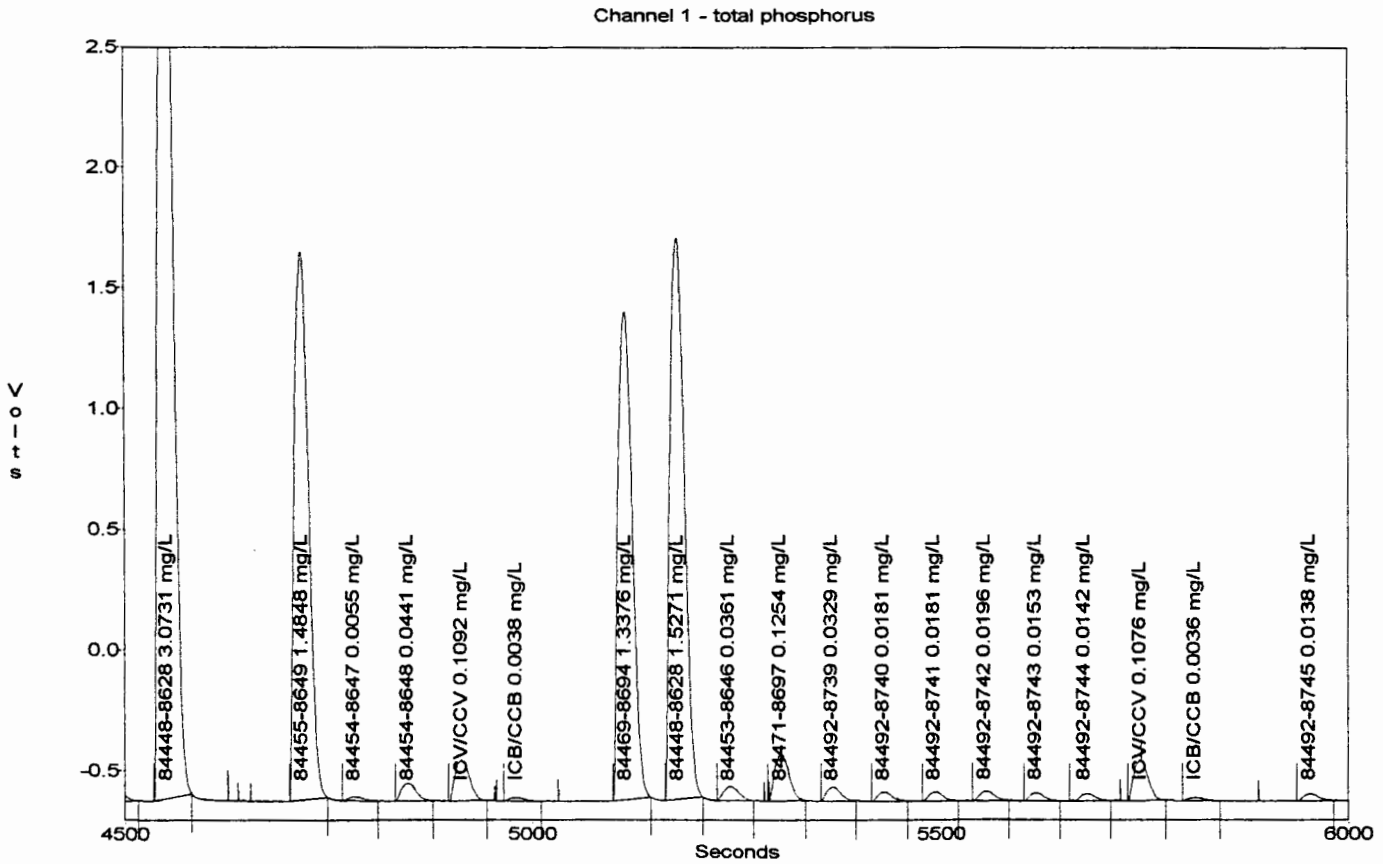
Cup: 7, Sample ID: CAL STD 0.004 ppm, Sample Type: CalStd
Rep 1/1, Level: 7, Peak Area: 349582.5625 µv-s

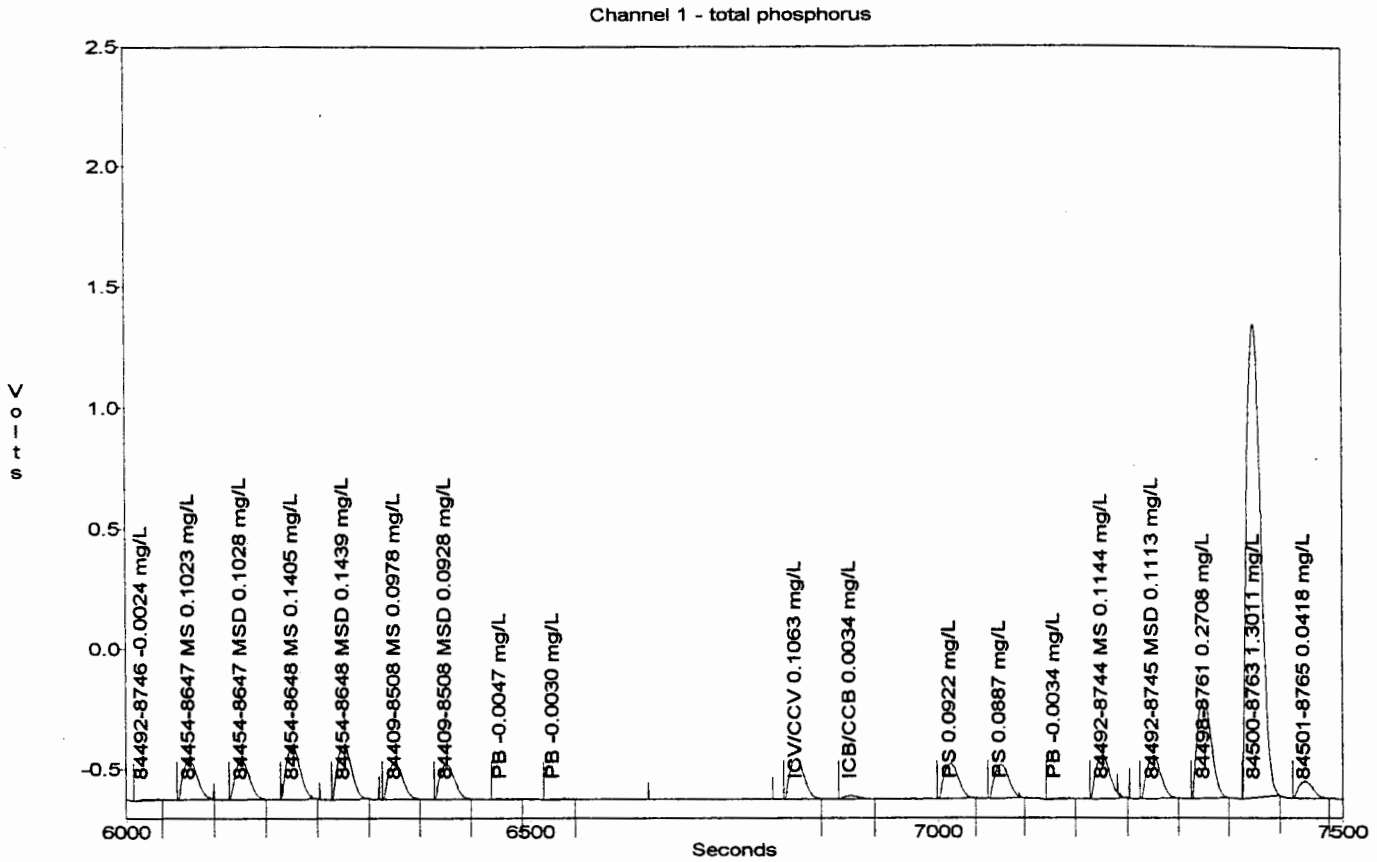
Cup: 8, Sample ID: CAL STD 0.000 ppm, Sample Type: CalStd
Rep 1/1, Level: 8, Peak Area: 141889.6563 µv-s

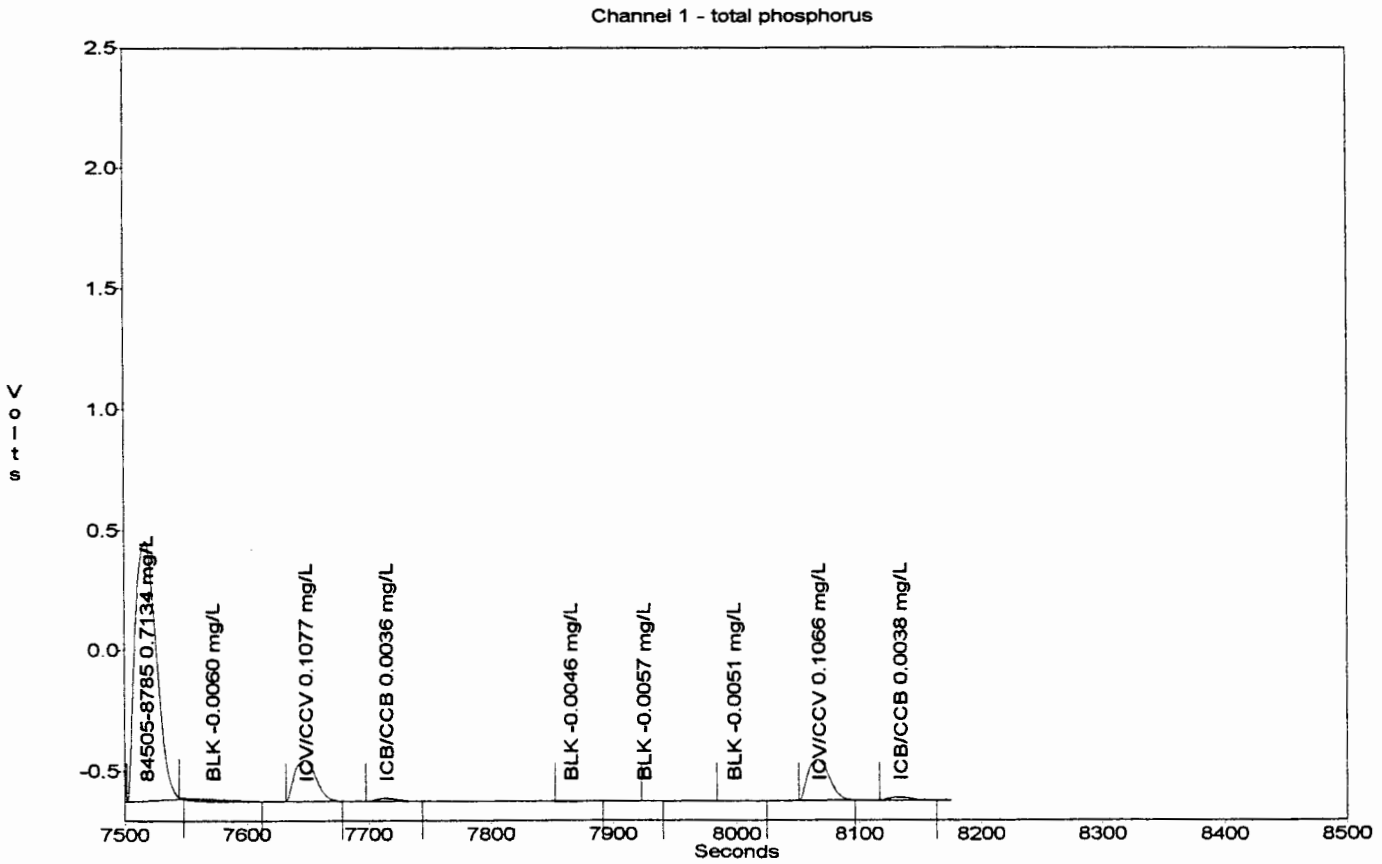

Channel 1 - total phosphorus
Volts
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
ICV/CCV 0.1073 mg/L
ICB/CCB -0.0053 mg/L
CCB -0.0056 mg/L
CCB -0.0043 mg/L
CCB -0.0042 mg/L
LLC 0.0144 mg/L
PB -0.0042 mg/L
1000
1250
1500
Seconds


Channel 1 - total phosphorus
Volts
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
PB -0.0047 mg/L
PS 0.0823 mg/L
PS 0.0838 mg/L
PB 0.0035 mg/L
PB -0.0048 mg/L
ICV/CCV 0.1077 mg/L
ICB/CCB 0.0036 mg/L
84469-8694 2.6560 mg/L
84409-8506 0.0108 mg/L
84409-8507 0.0167 mg/L
84409-8508 -0.0017 mg/L
84409-8509 -0.0027 mg/L
84409-8510 0.0011 mg/L
84409-8511 -0.0010 mg/L
84425-8556 0.0122 mg/L
1500
2000
2500
3000
Seconds


Channel 1 - total phosphorus
Volts
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
84425-8557 0.0053 mg/L
84425-8558 0.0368 mg/L
ICV/CCV 0.1085 mg/L
ICB/CCB 0.0011 mg/L
84469-8694 0.2406 mg/L
84429-8563 0.0674 mg/L
84426-8559 0.1145 mg/L
84464-8677 0.0053 mg/L
84464-8678 0.0030 mg/L
84464-8679 0.0094 mg/L
84464-8680 0.0103 mg/L
84464-8681 0.0094 mg/L
84464-8682 0.0112 mg/L
84447-8621 0.0005 mg/L
ICV/CCV 0.1080 mg/L
ICB/CCB 0.0036 mg/L
84447-8622 1.2305 mg/L
84447-8623 0.2482 mg/L
84447-8624 0.1172 mg/L
84447-8625 0.0378 mg/L
84447-8626 0.1649 mg/L
84447-8627 0.0404 mg/L
3000
3500
4000
4500
Seconds


Channel 1 - total phosphorus
Volts
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
84448-8628 3.0731 mg/L
84455-8649 1.4848 mg/L
84454-8647 0.0055 mg/L
84454-8648 0.0441 mg/L
ICV/CCV 0.1092 mg/L
ICB/CCB 0.0038 mg/L
84469-8694 1.3376 mg/L
84448-8628 1.5271 mg/L
84453-8646 0.0361 mg/L
84471-8697 0.1254 mg/L
84492-8739 0.0329 mg/L
84492-8740 0.0181 mg/L
84492-8741 0.0181 mg/L
84492-8742 0.0196 mg/L
84492-8743 0.0153 mg/L
84492-8744 0.0142 mg/L
ICV/CCV 0.1076 mg/L
ICB/CCB 0.0036 mg/L
84492-8745 0.0138 mg/L
4500
5000
5500
6000
Seconds


Channel 1 - total phosphorus
Volts
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
84492-8746 -0.0024 mg/L
84454-8647 MS 0.1023 mg/L
84454-8647 MSD 0.1028 mg/L
84454-8648 MS 0.1405 mg/L
84454-8648 MSD 0.1439 mg/L
84409-8508 MS 0.0978 mg/L
84409-8508 MSD 0.0928 mg/L
PB -0.0047 mg/L
PB -0.0030 mg/L
ICV/CCV 0.1063 mg/L
ICB/CCB 0.0034 mg/L
PS 0.0922 mg/L
PS 0.0887 mg/L
PB -0.0034 mg/L
84492-8744 MS 0.1144 mg/L
84492-8745 MSD 0.1113 mg/L
84498-8761 0.2708 mg/L
84500-8763 1.3011 mg/L
84501-8765 0.0418 mg/L
6000
6500
7000
7500
Seconds


Channel 1 - total phosphorus
Volts
2.5
2.0
1.5
1.0
0.5
0.0
-0.5
84505-8785 0.7134 mg/L
BLK -0.0060 mg/L
ICV/CCV 0.1077 mg/L
ICB/CCB 0.0036 mg/L
BLK -0.0046 mg/L
BLK -0.0057 mg/L
BLK -0.0051 mg/L
ICV/CCV 0.1066 mg/L
ICB/CCB 0.0038 mg/L
7500
7600
7700
7800
7900
8000
8100
8200
8300
8400
8500
Seconds

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 1 – Cup Range: 1 to 30

Cup	Sample ID	Sampling Time	Rep #	total phosphorus (mg/L)	Man Dil Factor	Auto Dil Factor
1	LLC	10:54:34	1	0.0144	1.0	1.00
2	PB	10:55:37	1	-0.0042	1.0	1.00 → read Air peak in middle
3	PB	10:56:41	1	-0.0047	1.0	1.00
4	PS	10:57:45	1	0.0823	1.0	1.00
5	PS	11:03:35	1	0.0838	1.0	1.00
6	84469-8694	11:10:38	1	2.6560	1.0	1.00
6	84469-8694	11:26:35	1	1.2029	5.0	1.00
6	84469-8694	11:56:01	1	2.6752	2.0	1.00
7	84409-8506	11:11:41	1	0.0108	1.0	1.00
8	84409-8507	11:15:11	1	0.0167	1.0	1.00
9	84409-8508	11:16:13	1	-0.0017	1.0	1.00
10	84409-8509	11:17:16	1	-0.0027	1.0	1.00
11	84409-8510	11:18:18	1	0.0011	1.0	1.00
12	84409-8511	11:19:21	1	-0.0010	1.0	1.00
13	84425-8556	11:20:23	1	0.0122	1.0	1.00
14	84425-8557	11:21:26	1	0.0053	1.0	1.00
15	84425-8558	11:22:28	1	0.0368	1.0	1.00
16	84429-8563	11:27:39	1	0.0674	1.0	1.00
17	84426-8559	11:28:42	1	0.1145	1.0	1.00
18	84464-8677	11:29:46	1	0.0053	1.0	1.00
19	84464-8678	11:30:50	1	0.0030	1.0	1.00
20	84464-8679	11:31:53	1	0.0094	1.0	1.00
21	84464-8680	11:32:57	1	0.0103	1.0	1.00
22	84464-8681	11:34:00	1	0.0094	1.0	1.00
23	84464-8682	11:35:04	1	0.0112	1.0	1.00
24	84447-8621	11:36:06	1	0.0005	1.0	1.00
25	84447-8622	11:40:21	1	1.2305	1.0	1.00
26	84447-8623	11:41:24	1	0.2482	1.0	1.00
27	84447-8624	11:42:27	1	0.1172	1.0	1.00
28	84447-8625	11:43:29	1	0.0378	1.0	1.00
29	84447-8626	11:44:32	1	0.1649	1.0	1.00
30	84447-8627	11:45:34	1	0.0404	1.0	1.00

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 1 -- Cup Range: 30 to 90

Cup	Sample ID	Sampling Time	Rep #	total phosphorus (mg/L)	Man Dil Factor	Auto Dil Factor
30	84447-8627	11:45:34	1	0.0404	1.0	1.00
31	84448-8628	11:46:38	1	3.0731	1.0	1.00
31	84448-8628	11:57:05	1	3.0541	2.0	1.00
32	84455-8649	11:49:25	1	1.4848	1.0	1.00
33	84454-8647	11:50:29	1	0.0055	1.0	1.00
34	84454-8648	11:51:35	1	0.0441	1.0	1.00
35	84453-8646	11:58:08	1	0.0361	1.0	1.00
36	84471-8697	11:59:11	1	0.1254	1.0	1.00
37	84492-8739	12:00:15	1	0.0329	1.0	1.00
38	84492-8740	12:01:18	1	0.0181	1.0	1.00
39	84492-8741	12:02:20	1	0.0181	1.0	1.00
40	84492-8742	12:03:23	1	0.0196	1.0	1.00
41	84492-8743	12:04:25	1	0.0153	1.0	1.00
42	84492-8744	12:05:28	1	0.0142	1.0	1.00
43	84492-8745	12:10:01	1	0.0138	1.0	1.00
44	84492-8746	12:11:04	1	-0.0024	1.0	1.00
45	84454-8647 MS	12:12:06	1	0.1023	1.0	1.00
46	84454-8647 MSD	12:13:10	1	0.1028	1.0	1.00
47	84454-8648 MS	12:14:14	1	0.1405	1.0	1.00
48	84454-8648 MSD	12:15:17	1	0.1439	1.0	1.00
49	84409-8508 MS	12:16:21	1	0.0978	1.0	1.00
50	84409-8508 MSD	12:17:25	1	0.0928	1.0	1.00
51	PB	12:18:28	1	-0.0047	1.0	1.00
51	PB	12:29:49	1	-0.0034	1.0	1.00
52	PB	12:19:32	1	-0.0030	1.0	1.00
53	PS	12:27:43	1	0.0922	1.0	1.00
54	PS	12:28:46	1	0.0887	1.0	1.00
55	84498-8761	12:32:57	1	1.3539	5.0	1.00
56	84500-8763	12:34:00	1	1.3011	1.0	1.00
57	84501-8765	12:35:02	1	0.0418	1.0	1.00
58	84505-8785	12:36:05	1	0.7134	1.0	1.00
59	84492-8744 MS	12:30:52	1	0.1144	1.0	1.00
60	84492-8745 MSD	12:31:54	1	0.1113	1.0	1.00
61	BLK	12:37:08	1	-0.0060	1.0	1.00
61	BLK	12:41:56	1	-0.0046	1.0	1.00
62	BLK	12:43:00	1	-0.0057	1.0	1.00
62	BLK	12:44:07	1	-0.0051	1.0	1.00
89	PB	11:04:38	1	0.0035	1.0	1.00
90	PB	11:05:41	1	-0.0048	1.0	1.00

Multi-Channel Table
Type: DQM
Channel Range: 1 to 8 – Cup Range: 1 to 90

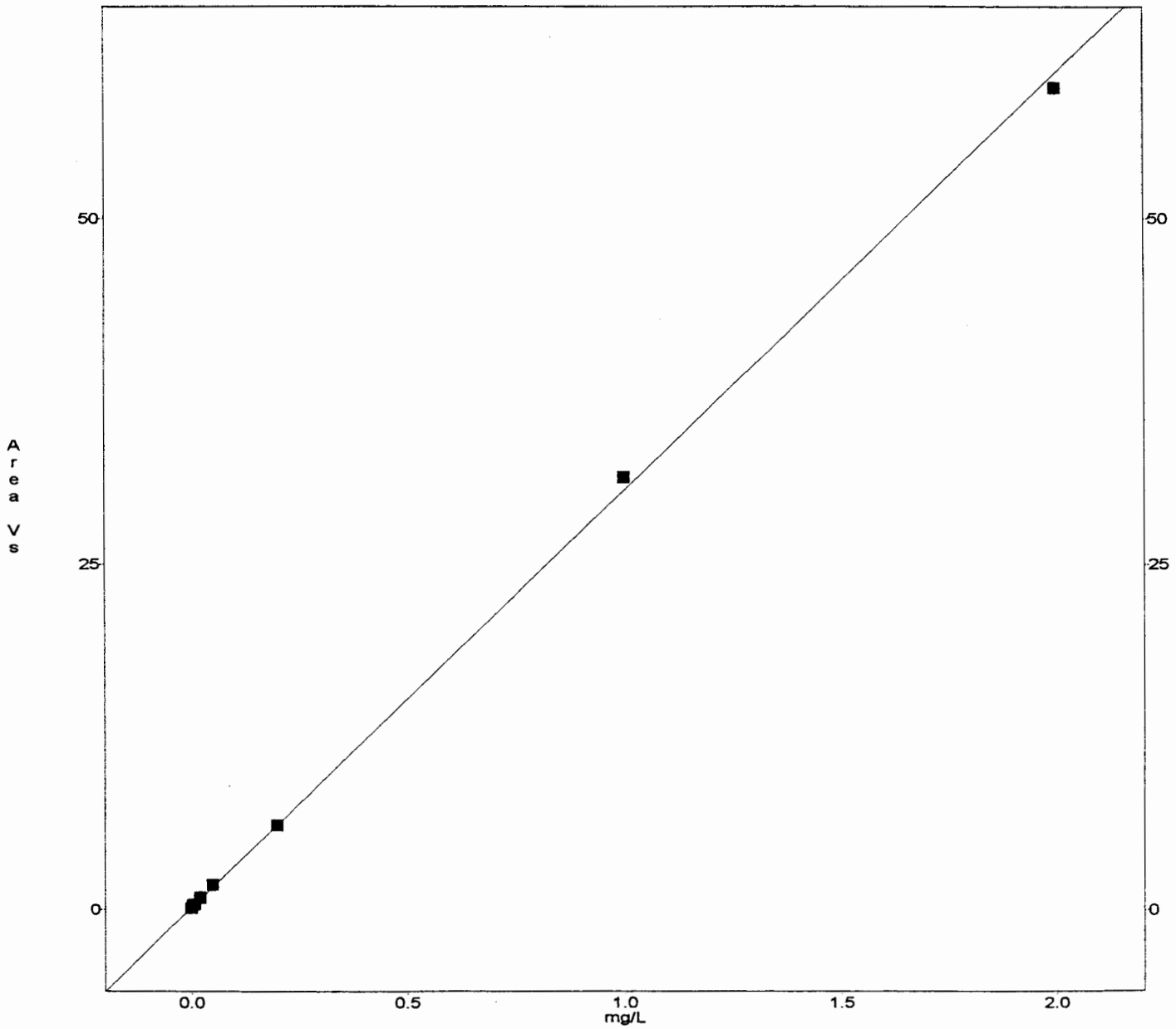
Cup	Sample ID	Sample Type	Sampling Time	Rep #	total phosphorus (mg/L)	Man Dil Factor	Auto Dil Factor	
15	ICV/CCV	RelChkStd	10:44:46	1	0.1073	1.0	1.00	107%
			Known Concentration:		0.1000			
			% Difference:		7.2904			
15	ICV/CCV	RelChkStd	11:07:33	1	0.1077	1.0	1.00	108%
			Known Concentration:		0.1000			
			% Difference:		7.7266			
15	ICV/CCV	RelChkStd	11:23:35	1	0.1085	1.0	1.00	108%
			Known Concentration:		0.1000			
			% Difference:		8.5384			
15	ICV/CCV	RelChkStd	11:37:12	1	0.1080	1.0	1.00	108%
			Known Concentration:		0.1000			
			% Difference:		7.9835			
15	ICV/CCV	RelChkStd	11:52:41	1	0.1092	1.0	1.00	109%
			Known Concentration:		0.1000			
			% Difference:		9.2014			
15	ICV/CCV	RelChkStd	12:06:34	1	0.1076	1.0	1.00	108%
			Known Concentration:		0.1000			
			% Difference:		7.6181			
15	ICV/CCV	RelChkStd	12:24:34	1	0.1063	1.0	1.00	106%
			Known Concentration:		0.1000			
			% Difference:		6.2828			
15	ICV/CCV	RelChkStd	12:38:14	1	0.1077	1.0	1.00	108%
			Known Concentration:		0.1000			
			% Difference:		7.7027			
15	ICV/CCV	RelChkStd	12:45:13	1	0.1066	1.0	1.00	107%
			Known Concentration:		0.1000			
			% Difference:		6.5831			
16	ICB/CCB	Blank	10:45:52	1	-0.0053	1.0	1.00	RR
16	ICB/CCB	Blank	11:08:40	1	0.0036	1.0	1.00	
16	ICB/CCB	Blank	11:24:41	1	0.0011	1.0	1.00	
16	ICB/CCB	Blank	11:38:19	1	0.0036	1.0	1.00	
16	ICB/CCB	Blank	11:53:47	1	0.0038	1.0	1.00	
16	ICB/CCB	Blank	12:07:41	1	0.0036	1.0	1.00	
16	ICB/CCB	Blank	12:25:41	1	0.0034	1.0	1.00	
16	ICB/CCB	Blank	12:39:21	1	0.0036	1.0	1.00	
16	ICB/CCB	Blank	12:46:20	1	0.0038	1.0	1.00	
61	CCB	RelChkStd	10:48:47	1	-0.0056	1.0	1.00	RR
			Known Concentration:		0.0020			
			% Difference:		-381.4207			
62	CCB	Blank	10:49:51	1	-0.0043	1.0	1.00	
90	CCB	AbsChkStd	10:52:41	1	-0.0042	1.0	1.00	— Air peak accounted
			Known Concentration:		0.1000			
			Difference:		-0.1042			

total phosphorus

Lvl	Area	mg/L	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Replic STD	Replic % RSD	Residual 1st Poly
1	59504912	2.000	59504912					0.0	0.0	1.8
2	31321586	1.000	31321586					0.0	0.0	-3.1
3	6183059	0.200	6183059					0.0	0.0	0.6
4	1791845	0.050	1791845					0.0	0.0	-6.7
5	854254	0.020	854254					0.0	0.0	-11.6
6	416738	0.008	416738					0.0	0.0	2.1
7	349583	0.004	349583					0.0	0.0	-40.1
8	141890	0.000	141890					0.0	0.0	

1st Order Poly
Conc = 3.311e-008 Area - 5.969e-003
r = 0.9997

Scaling: None - Weighting: 1/X



Printed: Wednesday, September 30, 1998 - 12:59 PM

TP Log Book

PROJ. #	SMPL. #	DATE	ANALYST	TP092984 COMMENTS
PD		9-29-98	KA	
PB				
PS				
PS				
84465	8644			
84429	8506			
	07			
	08			
	09			
	10			
	11			
84425	8556			
	57			
	58			
84429	8563			
84426	8559			
84464	8677			
	78			
	79			
	80			
	81			
	82			
84447	8621			
	22			
	23			
	24			
	25			
	26			
	27			
84448	8628			
84455	8649			
84454	8647			
84454	8648			
84453	8646			
84471	8697			
84492	8739			
	40			
	41			
	42			
	43			
	44			
	45			
	46			
84454	8647 MS			
	MSD			
84454	8648 MS			
	MSD			
84469	8708 MS			
	MSD			
PS				
DS				
PB				
PS				
84498	8761			XS
84500	8763			City of Hanise
501	8765			Robinson
505	8765			Delphi

Delphi

INSTRUMENT LOG

#	PROJ. #	SMPL. #	DATE	ANALYST	COMMENTS
1	LLC		9-30-91	KA	~~TTO 9-30-91~~ TP093003A
2	PB				WD
3	PB				
4	PS				87%
5	PS				24%
6	84469	8694			X
7	84469	8561			
8		07			
9		08			
10		09			
11		10			
12		11			
13	84425	8556			
14		57			
15		58			
16	84429	8563			
17	84426	8559			
18	84464	8677			
19		78			
20		79			
21		80			
22		81			
23		82			
24	84447	8621			
25		22			
26		23			
27		24			
28		25			
29		26			
30		27			
31	84448	8622			X2
32	84455	8649			
33	84454	8647			
34		48			
35	84453	8646			
36	84471	8697			
37	84491	8739			
38		40			
39		41			
40		42			
41		43			
42		44			
43		45			
44		46			
45	84454	8647 ms			97%
46		msd			97%
47		8648 ms			96%
48		msd			100%
49	84409	8568 ms			95%
50		msd			91%
51	DB				~~WD~~
52	DB				WD
53	PS				107%
54	PS				20%
55	84498	8761			X5
56	84500	8763			
57	84501	8765			
58	84505	8785			
59	84492	8744 ms			100%
60		8745 msd			48%

TDS

DISSOLVED SOLIDS REPORT

natech Division

METHOD: 160.1 MATRIX: H20

DATE: 9-29-98 ANALYST: JL LOD: 10 UNITS: mg/L

COMMENTS:

RAW DATA					REPORT RESULTS		
WEIGHT SAMPLE + VESSEL AFTER DRIED 1ST	2ND	B WEIGHT VESSEL (g.)	C VOLUME SAMPLE (ml)	VESSEL I.D.	PROJECT NUMBER	SAMPLE NUMBER	RESULT mg/L
7926	68.7929	68.7927	25ml	A6	Blank		ND
0304	82.0309	82.0253	↓	20	84492	8739	200 (204)
8986	66.8990	66.8926		W137	Dup	8739	240
0832	65.0837	65.0793		C		8740	160 (156)
451	70.0456	70.0414		6C		8741	150 (146)
4963	71.4965	71.4940		67		8742	90 (92)
9784	819789	81.9784		XR	Blank		ND
~~8715~~ 815	79.8520	79.8497		OC		8743	70 (72)
8147	81.8150	81.8116		BO		8744	120 (124)
0126	82.0131	82.0097		WA	8745	~~8746~~	120 (116)
9908	67.9913	67.9923		W143		8746	ND
5531	70.5535	70.5460		W1	84445	8619	280 (284)

CALCULATION: (A - B) / C * 1000mg/g * 1000ml/L

BLANK < LOD

RPD < 20%

RPD:

DATE: 9-29-98 ANALYST: JL LOD: 10 UNITS: mg/L

COMMENTS: Dissolved Solids

RAW DATA					REPORT RESULTS		
A. WEIGHT SAMPLE + VESSEL AFTER DRIED 1ST	2ND	B WEIGHT VESSEL (g.)	C VOLUME SAMPLE (ml)	VESSEL I.D.	PROJECT NUMBER	SAMPLE NUMBER	RESULT mg/L
66.7547	66.7549	66.7547	25mL	☺	Blank		ND
65.2940	65.2945	65.2910	↓	G5	84464	8677	120
83.0104	83.0109	83.0078	↓	∅	Dup	8677	108 (104)
81.0120	81.0125	81.0098		5		8678	90 (88)
82.8834	82.8839	82.8800		X		8679	140 (130)
72.6231	72.6236	72.6189		Z		8680	170 (168)
82.7280	82.7285	82.7248		MT		8681	130 (128)
80.8302	80.8304	80.8258		☹		8682	180 (176)

SAMPLE CALCULATION: {A - B} / C * 1000mg/g * 1000ml/L

LIMITS: BLANK < LOD

RPD < 20%

RPD:

TSS

12:00

SUSPENDED SOLIDS REPORT

METHOD: 160.2 MATRIX: H2O

DATE: 9-29-98 ANALYST: JL LOD: 1 UNITS: mg/L

COMMENTS:

RAW DATA				REPORT RESULTS		
A WEIGHT SAMP. + V AFTER DRY.	B WEIGHT VESSEL grams	C SAMPLE VOLUME mL	VESSEL I.D.	PROJECT REF. NO.	SAMPLE #	RESULT mg/L
.1196 .1195	.1198	200	1	Blank		ND
.1163 .1162	.1161	200	2	84471	8697	1
.1218 .1217	.1191	200	3	84492	8739	14
.1196 .1195	.1168	200	4		8740	14
.1170 .1170	.1171	200	5		8741	ND
.1206 .1205	.1194	200	6		8742	6
.1153 .1153	.1143	200	7		8743	5
.1163 .1162	.1152	200	8	Dup	8743	6 (5.5)
.1175 .1175	.1173	200	9		8744	1
.1178 .1178	.1178	200	10		8745	ND
.1174 .1176	.1176	200	11		8746	ND

V = VESSEL
V. I.D. = Weighing Vessel I.D.
LIMITS: %RPD of DUPs <20%
ICB,CCB: +/- 1*(L.O.D.)

SAMPLE CALCULATION

SUSPENDED SOLIDS REPORT

METHOD: 160.2 MATRIX: H20

DATE: 9-28-98 ANALYST: JL LOD: 1 UNITS: mg/L

COMMENTS:

RAW DATA				REPORT RESULTS		
A WEIGHT SAMP. + V AFTER DRY.	B WEIGHT VESSEL grams	C SAMPLE VOLUME mL	VESSEL I.D.	PROJECT REF. NO.	SAMPLE #	RESULT mg/L
.1170 .1168	.1171	200	1	Blank		ND
.1189 .1190	.1174	100	2	84444	8617	15
.1182 .1181	.1165	100	3	Dup	8617	17
.1191 .1191	.1180	200	4	84453	8645	6
.1189 .1188	.1179	200	5	Dup	8645 JL	5
.1217 .1217	.1199	200	6		8646	9
.1217 .1217	.1210	200	7	84454	8647	4
.1151 .1152	.1144 ~~.1169~~	200	8		8648	4
.1215 .1216	.1169	200	9	84456 ~~84456~~	8650	23
.1175 .1177	.1168	200	10	84459	8659	4
.1173 .1171	.1143	200	11	84464	8677	15

2/16

V = VESSEL
V. I.D. = Weighing Vessel I.D.
LIMITS: %RPD of DUPs <20%
ICB,CCB: +/- 1*(L.O.D.)

SAMPLE CALCULATION

2:30

SUSPENDED SOLIDS REPORT

METHOD: 160.2 MATRIX: H2O

DATE: 9-28-98 ANALYST: SC LOD: 1 UNITS: mg/L

COMMENTS:

RAW DATA				REPORT RESULTS		
A WEIGHT SAMP. + V AFTER DRY.	B WEIGHT VESSEL grams	C SAMPLE VOLUME mL	VESSEL I.D.	PROJECT REF. NO.	SAMPLE #	RESULT mg/L
.1233 .1233	.1235	200	12	64464	8678	ND
.1184 .1183	.1185	200	13		8679	ND
.1161 .1162	.1159	200	14		8680	1
.1177 .1176	.1178	200	15		8681	ND
.1155 .1156	.1158	200	16		8682	ND

V = VESSEL
V. I.D. = Weighing Vessel I.D.
LIMITS: %RPD of DUPs <20%
ICB,CCB: +/- 1*(L.O.D.)

SAMPLE CALCULATION

METHOD 300.0

CTE Environmental Services
Alaska Division
Laboratory Data Report

Project: NMED 9.98-WRC (a) (HRMB)

Client: CT & E Environmental Serv. Anatech Di.

CTE Work Order: 985638

Section 1: Case Narrative Information (COC, etc.)
Section 2: CTE Final Reports
Section 3.1, 4.1, 5.1 . . .: Quality Control Summary Forms
Section 3.2, 4.2, 5.2 . . .: Initial Calibrations
Section 3.3, 4.3, 5.3 . . .: Raw Analytical Data, if required

Sections 3 and above are arranged consecutively in the following fashion: Volatiles, SemiVolatiles, Metals, Inorganics, Miscellaneous.

All quality assurance/quality control criteria is in compliance with the Alaska Department of Environmental Conservation (ADEC) and/or CTE's Assurance Program Plan.

Additional data is available from the laboratory should more information be required. Please contact the Quality Assurance Manager should any questions occur.

Prepared by (Signature) Marjorie Fowler
(Printed Name) MARJORIE FOWLER
(Date) 21 OCT 98

Reviewed by (Signature) Mike Utley
(Printed Name) Mike Utley
(Date) 10/22/98

Section 1.0

Case Narrative

Customer: CTEANMI **CT & E Environmental Serv. Anatech Di.**

Project: 985638 **NMED 9.98-WRC (a) (HRMB)**

985638001 PS

EPA 300 - Sample received and analyzed past hold time for Nitrite per client request.

985638002 PS

EPA 300 - Sample received and analyzed past hold time for Nitrite per client request.

985638003 PS

EPA 300 - Sample received and analyzed past hold time for Nitrite per client request.

985638004 PS

EPA 300 - Sample received and analyzed past hold time for Nitrite per client request.

985638005 PS

EPA 300 - Sample received and analyzed past hold time for Nitrite per client request.

985638006 PS

EPA 300 - Sample received and analyzed past hold time for Nitrite per client request.

985638007 PS

EPA 300 - Sample received and analyzed past hold time for Nitrite per client request.

985638008 PS

EPA 300 - Sample received and analyzed past hold time for Nitrite per client request.

985638009 PS

EPA 300 - Sample received and analyzed past hold time for Nitrite per client request.

985638010 PS

EPA 300 - Sample received and analyzed past hold time for Nitrite per client request.

985638011 PS

EPA 300 - Sample received and analyzed past hold time for Nitrite per client request.

985638012 PS

EPA 300 - Sample received and analyzed past hold time for Nitrite per client request.

195130 MS

EPA 300 - MS outside control limits (bias high) for all analytes. LCS and Duplicate are within control limits.

985638013 BMS

EPA 300 - Sample received and analyzed past hold time for Nitrite per client request.

Sample was not spiked; results are used for duplicate/precision analysis only.

985638014 BMSD

Sample was not spiked; results are used for duplicate/precision analysis only.

EPA 300 - Sample received and analyzed past hold time for Nitrite per client request.

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anmcode	Exmcode	Logdate	Extdate	Anadate	Lablotctl	Run Sub
985638	Rinsate 9-98 84492-8476	985638012	WS	CS	E300	NONE	09/21/98	09/29/98	09/29/98	1564WXX	1
985638	SP-10-98 84492-8739	985638007	WS	CS	E300	NONE	09/23/98	09/29/98	09/29/98	1564WXX	1
985638	SP-3-98 84464-8677	985638001	WS	CS	E300	NONE	09/22/98	09/29/98	09/29/98	1564WXX	1
985638	SP-3A-98 84464-8678	985638002	WS	CS	E300	NONE	09/22/98	09/29/98	09/29/98	1564WXX	1
985638	SP-4-98 84464-8680	985638004	WS	CS	E300	NONE	09/22/98	09/29/98	09/29/98	1564WXX	1
985638	SP-4A-98 84464-8681	985638005	WS	CS	E300	NONE	09/22/98	09/29/98	09/29/98	1564WXX	1
985638	SP-5-98 84464-8679	985638003	WS	CS	E300	NONE	09/22/98	09/29/98	09/29/98	1564WXX	1
985638	SP-5-98(A) 84464-8682	985638006	WS	CS	E300	NONE	09/22/98	09/29/98	09/29/98	1564WXX	1
985638	SP-6-98 84492-8742	985638010	WS	CS	E300	NONE	09/23/98	09/29/98	09/29/98	1564WXX	1
985638	SP-9B-98 84492-8741	985638009	WS	CS	E300	NONE	09/23/98	09/29/98	09/29/98	1564WXX	1
985638	SP-ANCHO-98 84492-8743	985638011	WS	CS	E300	NONE	09/24/98	09/29/98	09/29/98	1564WXX	1
985638	SP-DOE-98 84492-8740	985638008	WS	CS	E300	NONE	09/23/98	09/29/98	09/29/98	1564WXX	1
		195147	WS	BS1	E300	NONE	/ /	09/29/98	09/29/98	1564WXX	1
		195129	WS	LR1	E300	NONE	/ /	09/29/98	09/29/98	1564WXX	1
		985638013	WS	LR2	E300	NONE	/ /	09/29/98	09/29/98	1564WXX	1
		985638014	WS	LR3	E300	NONE	/ /	09/29/98	09/29/98	1564WXX	1
		195130	WS	MS1	E300	NONE	/ /	09/29/98	09/29/98	1564WXX	1
		195145	WS	RS1	E300	NONE	/ /	09/29/98	09/29/98	1564WXX	1

985638

Chain of Custody

Lab ID#

CT&E Environmental Services Inc.

Anatech Division, 1200 Conrad Industrial Dr., Ludington, MI 49431-2681

/ Page 2

Phone: 616-843-1877 FAX: 616-845-9942

Results To: CT&E - Anatech
1200 Conrad Ind. Dr
Ludington, MI 49431

Attention: JASON ASHER

Telephone # 616-843-1877

FAX ? (Yes) No FAX # 616-845-9942

Invoice To: SAME

Telephone #

Project Name: NMED 9.98-WRC (a) (HRMB)

Project Number: 9.98-WRC Springs

State in which samples were collected: NM

REQUIRED COMPLETION DATE: 2 wks

Sampled by: JRY

Work Authorization Signature: Jason A Asher

This signature authorizes CT&E to perform the work requested on this form and acknowledges the terms and conditions of payment which are listed on the reverse side of this form.

Test Methods: Method 300.0 ions NO_2, NO_3, F, Cl, Br, SO_4

Comment/Notes: Quote #

Level IV QA/QC within 30 days

Sample ID	Client Sample ID	Sampling Location	Date	Time am / pm	Comp Grab C/G	Sample Matrix	Drinking Water Y/N	Field Filtered Y/N	Method 300.0 ions	VOC	Glass	O&G	250m Pl	500m Pl	1L Pl	Other	pH Check
1	SP-3-98	84464-8677	9/22	9:05	G	H_2O	N	N	X								
2	SP-3A-98	84464-8678	9/22	10:01	G	H_2O	N	N	X								
3	SP-5-98	84464-8679	9/22	11:05	G	H_2O	N	N	X								
4	SP-4-98	84464-8680	9/22	12:40	G	H_2O	N	N	X								
5	SP-4A-98	84464-8681	9/22	1500	G	H_2O	N	N	X								
6	SP-5-98 (A)	84464-8682	9/22	11:05	G	H_2O	N	N	X								
7	SP-10-98	84492-8739	9/23	917	G	H_2O	N	N	X								
8	SP-DOE-98	84492-8740	9/23	1210	G	H_2O	N	N	X								
9	SP-4B-98	84492-8741	9/23	1430	G	H_2O	N	N	X								
10	SP-6-98	84492-8742	9/23	1100	G	H_2O	N	N	X								

Relinquished by	Date / Time (am / pm)	Relinquished by	Date / Time (am / pm)	Relinquished by	Date / Time (am / pm)
Received by Joyce Winn	Date / Time (am / pm) 9-29-98 1200 NOON	Received by	Date / Time (am / pm)	Received by	/ Time (am / pm)
Cooler Temp #1	Cooler Temp #2	Cooler Temp #3	Cooler Temp #4		

985638

Chain of Custody

Lab ID#

CT&E Environmental Services Inc.

Anatech Division, 1200 Conrad Industrial Dr., Ludington, MI 49431-2681

2 Page 2

Phone: 616-843-1877 FAX: 616-845-9942

Results To: CT&E
1200 Conrad Ind. Dr
Ludington, MI 49431
616-843-1877

Attention: JASON ASHER

~~Telephone#~~

FAX? Yes No FAX # 616-845-9942

Invoice To: SAME

Telephone #

Project Name: NMED 9.98-WRC(a) (HRMB)

Project Number: 9.98-WRC Springs

State in which samples were collected: NM

REQUIRED COMPLETION DATE: 2 weeks

Sampled by: JRY

Work Authorization Signature:

This signature authorizes CT&E to perform the work requested on this form and acknowledges the terms and conditions of payment which are listed on the reverse side of this form.

Comment/Notes

Quote #

USE SP-Ancho-98 for MS/MSD

Sample ID	Client Sample ID	Sampling Location	Date	Time am / pm	Comp Grab C/G	Sample Matrix	Drinking Water Y/N	Field Filtered Y/N	Method 300.0 ions NO_2, NO_3, F, Cl, Br, SO_4								VOC	Glass	O&G	250m PI	500m PI	1L PI	Other	pH Check
11	SP-Ancho-98	84492-8743	9/24	1230	G	H_2O	N	N	X															
12	Rinsate 9-98	84492-8476	9/21	1900	C	H_2O	N	N	X															
13	SP-Ancho 98 MS	84492-8744	9/24	1230	G	H_2O	N	N	X															
14	SP Ancho 98 MSD	84492-8745	9/24	1230	G	H_2O	N	N	X															

Relinquished by	Date / Time (am / pm)	Relinquished by	Date / Time (am / pm)	Relinquished by	Date / Time (am / pm)
Received by Joyce Wu	Date / Time (am / pm) 9-29-98 1200 NOON	Received by	Date / Time (am / pm)	Received by	Date / Time (am / pm)
Cooler Temp #1	Cooler Temp #2	Cooler Temp #3	Cooler Temp #4		

CT&E Environmental Services Inc.

SAMPLE RECEIPT FORM

CT&E WO#: 985638

Yes	No	Notes:	
	✓	Are samples **RUSH**, priority, or *within 72 hrs* of **hold time**?	
		If yes, have you done *e-mail notification*?	
outside HT for NO_2		Are samples *within 24 hrs* of **hold time** or **due date**?	
N/A		If yes, have you *spoken with* Supervisor?	
		Are there any **problems** (e.g., ids, analyses)?	
		outside HT for analysis	
✓		If yes, have you notified Project Manager?	
	✓	Is this an ACOE/AFCEE/ADEC project?	
✓		Will a **data package** be required?	III
		If this is for PWS, provide **PWSID**.	
		Is there a **quote** for this project?	
		Will **courier** charges apply?	

*** The following *must* be completed for *all* ACOE & AFCEE projects: ***

Completed by (sign): _____ (print): _____

Yes	No	Notes:	
		Is cooler temperature 4 ± 2 C?	
		thermometer used:	
		Was there an airbill, etc? note #:	
		Was cooler sealed with custody seals?	
		#/where?	
		Were seals intact upon arrival?	
		Was there a COC with cooler?	
		Was the COC filled out properly?	
		Did the COC indicate ACOE/AFCEE project?	
		Did the COC and samples correspond?	
		Were samples screened with Geiger counter?	
		Were all samples packed to prevent breakage?	
		packing material:	
		Were all samples unbroken and clearly labelled?	
		Were all samples sealed in separate plastic bags?	
		Were all bottles for volatiles free of headspace?	
		Were correct container/sample sizes submitted?	
		Were samples preserved correctly? Verified?	
		Was client notified of problems? (specify below)	

ıdividual contacted: _____ _____

Date & Time: _____ Phone/Fax #: _____

Due Date: 10-1-98
Received Date/Time: 9-29-98
Cooler Temperature: 3.0
Sample Condition: Good / Poor

Matrix of each Sample:

1	" "	1-14
	" "	
	" "	
	Trip Blank	
	MS/MSD	

Additional Sample Remarks:

- ____ AK101s field preserved?
- ____ Field-filtered for dissolved____?
- ____ Lab-filter for dissolved____?
- ____ Ref Lab required?

Notes: _____

# of each Container Received:

	950 ml amber	unpres'd
	950 ml amber	w/ HCl
	1L cubies	unpres'd
	1L cubies	w/ HNO3
	1L cubies	w/ H2SO4
	120 ml coli	bottles
	60 ml	Nalg
	8 oz amber	unpres'd
	4 oz amber	unpres'd
	4 oz w/ septa	w/ MeOH
	40 ml vials	unpres'd
	40 ml vials	w/ HCl
14	Other (specify)	Short Plastic 8oz Bottles Blue Lids
	Other (specify)	
	Other (specify)	

#/Log In Proofed by: _____

Form Number: F004r01
Printed: 5/17/98

CT&E Environmental Services Inc.
Laboratory Division

Change Order / Work Amendment

200 W. Potter Drive
Anchorage, AK 99518-1605
Tel: (907) 562-2343
Fax: (907) 561-5301

Client: CTE-MI
Client PM: Jason Asher
Phone No. _____ Fax No. _____

Date/Time: 9/30/98 @ 19:15
Initiated By: Heather Hall
CT&E PM: ↓

Project Name: NMED 9.98-WRC (a) (HRMB)
CT&E Workorder: 98.5638

Action To Be Taken: Add'l Analysis ____ Delete Analysis ____ Add Rush ____
Other: _____

Client ID	CT&E #	Specific Requirements	Test Code	Add'l Cost
	all	samples rec'd past hold time for NO_2		
			Total Additional Costs:	

Comments / Details: Please advise: Do you want NO_2 analyzed + reported w/ comment "rec'd + run past HT" or would you prefer to delete NO_2?

Authorization: To assure that the correct action is taken, this form will be faxed to the client. The client will review, sign and fax back to CT&E Project Manager (Fax **907-561-5301**) their authorization of this change in work/cost before the Change Order can be executed.

Client Approval: _____, Date: _____

Internal Routing: EP Tox____ GC____ GC Prep____ Waters____ Metals____ Micro____
O/G____ Oils____ Ref____ QA/QC____ Proj Mng____ Data Mng____ KM____ GP____

G:\Document\Forms\Chgorder.XLS
Revision 4
6/1/97

CT&E Environmental Services Inc.
Laboratory Division

200 W. Pond Drive
Anchorage, Alaska 1502
Tel: (907) 5[illegible]
Fax: (907) [illegible]

Change Order / Work Amendment

Client: CTE-MI
Date/Time: 2/30/98 @ 19
Client PM: Jason Asher
Initiated by: Heather Ma[illegible]
Phone No. _____ Fax No. _____
CT&E PM: [illegible]

Project Name: NMED 9 98-WRC (a) (HRMS)
CT&E Work Order: 98-563[illegible]

Action To Be Taken: Add'l Analysis ___ Delete Analysis ___ Add Rush ___
Other: _____

Client ID	CT&E #	Specific Requirements	Test Code	Add'l Cost
	all	samples rec'd past hold time for NO_2		
			Total Additional Cost	

Comments / Details: Please advise if you want NO_2 analyzed past holding time rec'd & then [illegible] or would you prefer to delete NO_2?

Analyze past holding time

Authorization: To assure that the correct action is taken, this form will be faxed to the client. The client will review, sign and fax back to CT&E Project Manager (Fax 907-561-53[illegible]) for authorization of this change in workflow before the Change Order can be executed.

Client Approval: Jason A Asher Date: 10/1/98

Internal Routing: EP Tox ___ GC ___ GC [illegible] ___ Metals ___ Metals ___ Micro ___
Oils ___ Ref ___ QA/QC ___ [illegible] ___ KM ___ GP ___

SGS Member of the SGS Group (Société Générale de Surveillance)

Code List

Code	Name
!	Out of control limits
1C	First Column Result - The Value Obtained from the First Column
2C	Second Column Result - The Value Obtained from the Second Column
<	Less Than
=	Equal To
>	Greater Than
ACZ	ACZ Laboratories, Steamboat, CO
AELF	American Environmental Laboratories, Pensacola, FL
AENP	American Environmental Network, Portland, OR
ALTC	Alta Analytical Lab Incorporated, El Dorado Hills, CA
APPL	Agriculture & Priority Pollutants Laboratories, Fresno, CA
ARDL	Applied Research and Development Lab, Inc., (ARDL) Mt. Vernon, IL
ARI	Analytical Resources, Inc., Seattle, WA
ATCA	Analytica, Anchorage, AK
ATCC	Analytica, CO
ATIA	Analytical Technologies, Inc., Anchorage, AK
ATIR	Analytical Technologies, Inc., Renton, WA
ATIS	Analytical Technologies, Inc., San Diego, CA
ATOX	Air Toxics LTD, Folsom, CA
BCLB	BC Laboratories, Bakersfield, CA
BD	Blank Spike Duplicate
BMLA	Boreochem Mobile Lab & Analytical Services
BRS	Brelje & Race, Santa Rosa, CA
BS	Blank Spike
CASA	Columbia Analytical Services, Inc., Anchorage, AK
CASB	Columbia Analytical Services, Inc., Bothell, WA
CASK	Columbia Analytical Services, Inc., Kelso, WA
CB	Calibration Blank
CC	Continuing Calibration Verification
CCAC	Coast-to-Coast Analytical Services, Inc., Camarillo, CA
CCSJ	Coast-to-Coast Analytical Services, Inc., San Jose, CA
CDM	CDM Federal Programs Corporation
CHEM	Chemic Laboratory, San Diego, CA
CHMC	CH2M Hill Analytical Services, Corvallis, OR
CKY	CKY Inc., Torrance, CA
CLPA	Contract Laboratory Program Accuracy Limits for Spiked Samples
CLPCC	CLP Continuing Calibration Acceptance Criteria
CLPIC	CLP Initial Calibration Acceptance Criteria
CLPLR	Contract Laboratory Program Precision for Lab Replicates
CLPP	Contract Laboratory Program Precision Limits for Spiked Samples
CLTP	Clayton Environmental Consultants, Inc., Pleasanton, CA
CS	Client Sample
CTB	Curtis & Tompkins, Berkeley, CA
CTE	CT&E Environmental Services, Inc., Anchorage, AK
CTEC	CT&E Environmental Services, Inc., Charleston, NC
DCHM	DataChem Laboratories, Inc., Salt Lake City, UT
DDL	Method Defined Detection Limit
DMP	D & M Laboratories, Petaluma, CA
DOWL	Dowl Engineering Alaska Test Labs, Anchorage, AK
EBA	EBA
ECEN	Ecology & Environment, Inc.
ECI	EcoChem, Inc.
EMXT	EMAX Laboratories, Inc., Torrance, CA

Code	Name
EQL	Estimated Quantitation Limit
ETCS	ETC, Santa Rosa, CA
FORA	Forensic Analytical
IC	Initial Calibration Verification
IDL	Instrument Detection Limit
IN	Internal Standard
KD	Known (External Reference Material) Duplicate
KIC	KIC Lab, Prudhoe Bay, AK
LAB1	Laboratory 1
LAB2	Laboratory 2
LAL	Lockheed Analytical Laboratory, Las Vegas, NV
LAS	LAS Laboratories, Inc.
LB	Lab Blank
LCC	Laboratory Continuing Calibration Accuracy
LDC	Laboratory Data Consultants
LIC	Laboratory Initial Calibration Accuracy
LLD	Lowest Level of Detection
LLR	Laboratory Established Precision for Lab Replicates
LR	Lab Replicate
LSA	Laboratory Sample Accuracy for Spiked Samples
LSP	Laboratory Sample Precision for Spiked Samples
LTL	Laucks Testing Lab, Inc.
MASA	MultiChem Analytical Services, Anchorage, AK
MASR	MultiChem Analytical Services, Renton, WA
MDL	Method Detection Limit
MEA	Method Established Accuracy for Spiked Samples
MECC	Method Established Continuing Calibration Acceptance Criteria
MEIC	Method Established Initial Calibration Acceptance Criteria
MELR	Method Established Precision for Laboratory Replicates
MEP	Method Established Precision for Spiked Samples
MLR	Matrix Laboratory Replicate Precision
MRL	Method Reporting Limit (lowest standard adjusted for prep.)
MS	GC/MS Result - Value Confirmed Using GC/MS
MS	Lab Matrix Spike
MSA	Matrix Spike Accuracy for Spiked Samples
MSP	Matrix Spike Precision for Spiked Samples
MSSL	Mountain States Analytical, Salt Lake City, UT
NA	Not Applicable
NA	Not Available - Result Not Available
NC	Non-Client Sample
NCAB	North Creek Analytical, Bothell, WA
NCAP	North Creek Analytical, Beaverton, OR
ND	Not Detected
NETB	NET Burbank, Burbank, CA
NETC	NET Cambridge, Bedford, MA
NETO	NET Portland, Portland, OR
NETS	NET Pacific, Inc., Santa Rosa, CA
NR	Not Reported - Data Not Reported
NTL	Northern Testing Laboratories, Anchorage, AK
NU	Not Usable - Data Not Usable
OEIR	OnSite Environmental, Inc., Redmond, WA
PAC	Pacific Analytical, Carlsbad, CA
PARA	Paragon Analytics, Inc., CO
PHLE	Philip Environmental
PiC	Pace Analytical Services, Inc., Camarillo, CA

Code	Name
PIHB	Pace Analytical Services, Inc., Huntington Beach, CA
PIL	Pace Analytical Services, Inc., Lenexa, KS
PIM	Pace Analytical Services, Inc., Minneapolis, MN
PIN	Pace Analytical Services, Inc., Novato, CA
PINY	Pace Analytical Services, Inc., New York, NY
PIP	Pace Analytical Services, Inc., Pittsburgh, PA
PITB	Pace Analytical Services, Inc., Tampa Bay, FL
PIWF	Pace Analytical Services, Inc., Wappingers Falls, NY
PQL	Practical Quantitation Limit
PR	Primary Result - The Primary Result for a Parameter
PRL	Parameter Range Limit
QALA	Quality Analytical Laboratores, Inc., Montgomery, AL
QALC	Quality Analytical Laboratories, Inc., Redding, CA
QES	Quanterra Environmental Services, Santa Ana, CA
QESA	Quanterra Environmental Services, Arvada, CO
QESC	Quanterra Environmental Services, North Canton, OH
QESF	Quanterra Environmental Services, Tampa, FL
QESG	Quanterra Environmental Services, Garden Grove,
QESI	Quanterra Environmental Services, City of Industry, CA
QESJ	Quanterra - Research Triangle Park Lab., Raleigh, NC
QESK	Quanterra Environmental Services, Knoxville, TN
QESL	Quanterra Environmental Services, St. Louis, MO
QESN	Quanterra Environmental Services, Anchorage, AK
QESP	Quanterra Environmental Services, Pittsburg, PA
QESR	Quanterra Environmental Services, Richland, WA
QESS	Quanterra Environmental Services, Sacramento, CA
QEST	Quanterra Environmental Services, Austin, TX
QESZ	Quanterra Environmental Services, Anchorage, AK
RM	Known (External Reference Material)
RS	Reagent Solvent
SAS	Sound Analytical Services, Inc., Tacoma, WA
SBSA	Both Reagent and Matrix Sample Accuracy for Surrogates
SBSP	Both Reagent and Matrix Sample Precision for Surrogates
SC3S	S-Cubed, A Division of Maxwell Laboratories, Inc., San Diego, CA
SCLA	Contract Laboratory Program Limits for Surrogate Accuracy
SCLP	Contract Laboratory Program Limits for Surrogate Precision
SD	Lab Matrix Spike Duplicate
SLSA	Laboratory Sample Limits for Accuracy for Surrogates
SLSP	Laboratory Sample Limits for Precision for Surrogates
SMEA	Method Established Limits for Accuracy for Surrogates
SMEP	Method Established Limits for Precision for Surrogates
SMSA	Sample Matrix Limits for Accuracy for Surrogates
SMSP	Sample Matrix Limits for Precision for Surrogates
SPEC	Spectra Laboratory, Inc., Tacoma, WA
SR	Semi-Quantitative Result
SRAD	Standard Reference Accuracy Defined by Agency/Manufacturer
SRMA	Standard Reference Material Accuracy Limits Determined by Lab
SRMP	Standard Reference Material Precision Limits Determined by Lab
SRPD	Standard Reference Precision Defined by Agency/Manufacturer
SU	Surrogate
SWAA	Shannon & Wilson, Inc., Anchorage, AK
SWLB	Southwest Laboratory
SWRI	Southwest Resarch Institute, San Antonio, TX
TI	Tentatively Identified Compound
TRID	Triangle Laboratories, Inc., Durham, NC

Section 2.0

CT&E Environmental Services Inc.

Laboratory Division

Laboratory Analysis Report

October 04, 1998

Jason Asher
CT & E Environmental Serv. Ana
1200 Conrad Industrial Dr.
Ludington, MI 49431-2681

Client Name	CT & E Environmental Serv. Anatech Di.
Project ID	NMED 9.98-WRC (a) (HRMB) [985638]
Printed	October 04, 1998

Enclosed are the analytical results associated with the above project.

As required by the state of Alaska and the USEPA, a formal Quality Assurance/Quality Control Program intained by CT&E. A copy of our Quality Control Manual that outlines this program is available ır request.

Except as specifically noted, all statements and data in this report are in conformance to the provisions set forth in our Quality Assurance Program Plan.

If you have any questions regarding this report or if we can be of any other assistance, please call your CT&E Project Manager at (907) 562-2343.

The following descriptors may be found on your report which will serve to further qualify the data.

U - Indicates the compound was analyzed for but not detected.
J - Indicates an estimated value that falls below PQL, but is greater than the MDL.
B - Indicates the analyte is found in the blank associated with the sample.
* - The analyte has exceeded allowable limits.
GT - Greater Than
D - Secondary Dilution
LT - Less Than
! - Surrogate out of range

200 W. Potter Drive, **Anchorage, AK 99518-1605** — Tel: (907) 562-2343 Fax: (907) 561-5301
3180 Peger Road, **Fairbanks, AK 99709-5471** — Tel: (907) 474-8656 Fax: (907) 474-9685

CT&E Environmental Services Inc.

CT&E Ref.#	985638001	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/22/98 09:05
Client Sample ID	SP-3-98 84464-8677	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Stale

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Water Department Analyses								
Fluoride	0.416	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Chloride	4.39	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	1.22	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	5.50	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638002	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/22/98 10:01
Client Sample ID	SP-3A-98 84464-8678	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
F de	0.386	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Chloride	3.45	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.143	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.116	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.911	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	4.87	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638003	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/22/98 11:05
Client Sample ID	SP-5-98 84464-8679	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Hale

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
de	0.371	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Chloride	4.13	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.730	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	4.90	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638004	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/22/98 12:40
Client Sample ID	SP-4-98 84464-8680	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Hale

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
F[illegible]ue	0.396	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Chloride	6.48	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.139	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	1.24	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	10.0	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638005	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/22/98 15:00
Client Sample ID	SP-4A-98 84464-8681	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Hale

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
F[illegible]de	0.471	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Chloride	5.25	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.106	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.999	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	6.29	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638006	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/22/98 11:05
Client Sample ID	SP-5-98(A) 84464-8682	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Hale

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
I e	0.351	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Chloride	4.07	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.110	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.720	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	5.02	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638007	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/23/98 09:17
Client Sample ID	SP-10-98 84492-8739	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Hale

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
de	0.419	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Chloride	2.14	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.511	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	2.62	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638008	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/23/98 12:10
Client Sample ID	SP-DOE-98 84492-8740	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Stall

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
Fl[illegible]de	0.426	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
([illegible]e	2.09	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nit[illegible]e-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.295	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	2.02	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638009	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/23/98 14:30
Client Sample ID	SP-9B-98 84492-8741	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
Fluoride	0.437	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
[illegible]de	2.25	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
[illegible]-N	0.136	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.438	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	2.27	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638010	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/23/98 11:00
Client Sample ID	SP-6-98 84492-8742	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Hale

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
F[illegible]e	0.323	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
C[illegible]e	2.25	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.417	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	2.64	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638011	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/24/98 12:30
Client Sample ID	SP-ANCHO-98 84492-8743	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Stokes

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
Fl[illegible]	0.331	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Cl[illegible]	2.15	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.322	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	2.47	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638012	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/21/98 19:00
Client Sample ID	Rinsate 9-98 84492-8476	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
F[illegible]	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Ch[illegible]e	0.598	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.192	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	0.200 U	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638013	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/24/98 12:30
Client Sample ID	SP-ANCHO-98 84492-8744	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
[illegible]le	0.334	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
C[illegible]de	2.29	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.324	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	2.46	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

CT&E Environmental Services Inc.

CT&E Ref.#	985638014	**Client PO#**	
Client Name	CT & E Environmental Serv. Anatech Di.	**Printed Date/Time**	10/04/98 14:08
Project Name/#	NMED 9.98-WRC (a) (HRMB)	**Collected Date/Time**	09/24/98 12:30
Client Sample ID	SP-ANCHO-98 84492-8745	**Received Date/Time**	09/29/98 12:00
Matrix	Water (Surface, Eff., Ground)	**Technical Director: Stephen C. Ede**	
Ordered By			
PWSID		**Released By**	Heather Hale

Sample Remarks:
EPA 300 - Sample recieved and analyzed past hold time for Nitrite per client request.

Parameter	Results	PQL	Units	Method	Allowable Limits	Prep Date	Analysis Date	Init
Waters Department Analyses								
F[illegible]	0.325	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Ch[illegible]e	2.22	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrite-N	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Bromide	0.100 U	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Nitrate-N	0.312	0.100	mg/L	EPA 300.0		09/29/98	09/29/98	GCP
Sulfate	2.51	0.200	mg/L	EPA 300.0		09/29/98	09/29/98	GCP

Section 3.0

Section 3.1

CT&E Environmental Services Inc.
Analytical Quality Control Summary Page

Department: WATERS

QC Parameter	Criteria Met?		
A. Calibration:	Y	N	N/A
B. Instrument/Method Blank:	Y	N	N/A
C. Initial/Continuing Calibration Verifications	Y	N	N/A
D. Laboratory Control Sample:	Y	N	N/A
E. Laboratory Control Sample Duplicate:	Y	N	N/A
Relative Percent Difference	Y	N	N/A
F. Sample Duplicate	Y	N	N/A
G. Matrix Spike	Y *	N	N/A
H. Matrix Spike Duplicate	Y	N	N/A
Relative Percent Difference	Y	N	N/A
I. Sample Surrogates:	Y	N	N/A
J. QC Surrogates:	Y	N	N/A
K. Sample Holding Time	Y	N	N/A

Any parameter that did not meet QA criteria is fully explained below:

See Narrative

Is there any further action necessary for any out of control events described above? Y N

Should a Corrective Action be initiated? Y N

I certify that except as specifically noted in this report, all statements and data appearing in this report are in conformance with the provisions of the Quality Assurance Plan (QAP) prepared by this firm and on file with the Alaska Department of Environmental Conservation.

Reviewer's Signature: Mike Wilby
Date: 10/22/98

***** All out of control events require a supervisor's signature as reviewer. *****

CT&E Environmental Services, Inc., Anchorage, AK

Lab Report No.: 985638 Date: 10/04/98

Project Name: NMED 9.98-WRC (a) (HRMB)

Project No: NA

Field ID: SP-3-98 84464-8677

Descr/Location:

Sample Date: 09/22/98

Sample Time: 0905

Lab Samp ID: 985638001

Basis: Not Filtered

Matrix: Surface Water

Analyte	Detection Limit	Reporting Limit	Note	Result	Units	Dil	Prep Method	Analysis Method	Analysis Date	QC Batch
Bromide	0.0988	0.100 PQL		ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Chloride	0.0609	0.200 PQL		4.39	MG/L	1	NONE	E300	09/29/98	1564WXX
Fluoride	0.0709	0.100 PQL		0.416	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrate (as N)	0.0062	0.100 PQL		1.22	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrite	0.0438	0.100 PQL	CI	ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Sulfate	0.0542	0.200 PQL		5.50	MG/L	1	NONE	E300	09/29/98	1564WXX

CI: See narrative

Approved b' _____ Date: _____

Lab Report No.: 985638 Date: 10/04/98

Project Name: NMED 9.98-WRC (a) (HRMB)

Project No: NA

Field ID: SP-3A-98 84464-8678

Descr/Location:

Sample Date: 09/22/98

Sample Time: 1001

Lab Samp ID: 985638002

Basis: Not Filtered

Matrix: Surface Water

Analyte	Detection Limit	Reporting Limit	Note	Result	Units	Dil	Prep Method	Analysis Method	Analysis Date	QC Batch
Bromide	0.0988	0.100 PQL		0.116	MG/L	1	NONE	E300	09/29/98	1564WXX
Chloride	0.0609	0.200 PQL		3.45	MG/L	1	NONE	E300	09/29/98	1564WXX
Fluoride	0.0709	0.100 PQL		0.386	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrate (as N)	0.0062	0.100 PQL		0.911	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrite	0.0438	0.100 PQL	CI	0.143	MG/L	1	NONE	E300	09/29/98	1564WXX
Sulfate	0.0542	0.200 PQL		4.87	MG/L	1	NONE	E300	09/29/98	1564WXX

CI: See narrative

Approved b _____ Date _____

CT&E Environmental Services, Inc., Anchorage, AK

Lab Report No.: 985638 Date: 10/04/98

Project Name: NMED 9.98-WRC (a) (HRMB)

Project No: NA

Field ID: SP-5-98 84464-8679

Descr/Location:

Sample Date: 09/22/98

Sample Time: 1105

Lab Samp ID: 985638003

Basis: Not Filtered

Matrix: Surface Water

Analyte	Detection Limit	Reporting Limit	Note	Result	Units	Dil	Prep Method	Analysis Method	Analysis Date	QC Batch
Bromide	0.0988	0.100 PQL		ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Chloride	0.0609	0.200 PQL		4.13	MG/L	1	NONE	E300	09/29/98	1564WXX
Fluoride	0.0709	0.100 PQL		0.371	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrate (as N)	0.0062	0.100 PQL		0.730	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrite	0.0438	0.100 PQL	CI	ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Sulfate	0.0542	0.200 PQL		4.90	MG/L	1	NONE	E300	09/29/98	1564WXX

CI: See narrative

Approved by: _____ Date: _____

Lab Report No.: 985638 Date: 10/04/98

Project Name: NMED 9.98-WRC (a) (HRMB)

Project No: NA

Field ID: SP-4-98 84464-8680

Descr/Location:

Sample Date: 09/22/98

Sample Time: 1240

Lab Samp ID: 985638004

Basis: Not Filtered

Matrix: Surface Water

Analyte	Detection Limit	Reporting Limit	Note	Result	Units	Dil	Prep Method	Analysis Method	Analysis Date	QC Batch
Bromide	0.0988	0.100 PQL		0.139	MG/L	1	NONE	E300	09/29/98	1564WXX
Chloride	0.0609	0.200 PQL		6.48	MG/L	1	NONE	E300	09/29/98	1564WXX
Fluoride	0.0709	0.100 PQL		0.396	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrate (as N)	0.0062	0.100 PQL		1.24	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrite	0.0438	0.100 PQL	CI	ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Sulfate	0.0542	0.200 PQL		10.0	MG/L	1	NONE	E300	09/29/98	1564WXX

CI: See narrative

Approved by: _____ Date: _____

CT&E Environmental Services, Inc., Anchorage, AK

Lab Report No.: 985638 Date: 10/04/98

Project Name: NMED 9.98-WRC (a) (HRMB)

Project No: NA

Field ID: SP-4A-98 84464-8681
Descr/Location:

Sample Date: 09/22/98
Sample Time: 1500
Lab Samp ID: 985638005

Basis: Not Filtered
Matrix: Surface Water

Analyte	Detection Limit	Reporting Limit	Note	Result	Units	Dil	Prep Method	Analysis Method	Analysis Date	QC Batch
Bromide	0.0988	0.100 PQL		0.106	MG/L	1	NONE	E300	09/29/98	1564WXX
Chloride	0.0609	0.200 PQL		5.25	MG/L	1	NONE	E300	09/29/98	1564WXX
Fluoride	0.0709	0.100 PQL		0.471	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrate (as N)	0.0062	0.100 PQL		0.999	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrite	0.0438	0.100 PQL	CI	ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Sulfate	0.0542	0.200 PQL		6.29	MG/L	1	NONE	E300	09/29/98	1564WXX

CI: See narrative

Approved b _____ Date _____

Lab Report No.: 985638 Date: 10/04/98

Project Name: NMED 9.98-WRC (a) (HRMB)

Project No: NA

Field ID: SP-5-98(A) 84464-8682

Descr/Location:

Sample Date: 09/22/98

Sample Time: 1105

Lab Samp ID: 985638006

Basis: Not Filtered

Matrix: Surface Water

Analyte	Detection Limit	Reporting Limit	Note	Result	Units	Dil	Prep Method	Analysis Method	Analysis Date	QC Batch
Bromide	0.0988	0.100 PQL		0.110	MG/L	1	NONE	E300	09/29/98	1564WXX
Chloride	0.0609	0.200 PQL		4.07	MG/L	1	NONE	E300	09/29/98	1564WXX
Fluoride	0.0709	0.100 PQL		0.351	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrate (as N)	0.0062	0.100 PQL		0.720	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrite	0.0438	0.100 PQL	CI	ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Sulfate	0.0542	0.200 PQL		5.02	MG/L	1	NONE	E300	09/29/98	1564WXX

CI: See narrative

Approved _____ Dat _____

CT&E Environmental Services, Inc., Anchorage, AK

Lab Report No.: 985638 Date: 10/04/98

Project Name: NMED 9.98-WRC (a) (HRMB)

Project No: NA

Field ID: SP-10-98 84492-8739

Descr/Location:

Sample Date: 09/23/98

Sample Time: 0917

Lab Samp ID: 985638007

Basis: Not Filtered

Matrix: Surface Water

Analyte	Detection Limit	Reporting Limit	Note	Result	Units	Dil	Prep Method	Analysis Method	Analysis Date	QC Batch
Bromide	0.0988	0.100 PQL		ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Chloride	0.0609	0.200 PQL		2.14	MG/L	1	NONE	E300	09/29/98	1564WXX
Fluoride	0.0709	0.100 PQL		0.419	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrate (as N)	0.0062	0.100 PQL		0.511	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrite	0.0438	0.100 PQL	CI	ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Sulfate	0.0542	0.200 PQL		2.62	MG/L	1	NONE	E300	09/29/98	1564WXX

CI: See narrative

Approved b _____ Date _____

Project Name: NMED 9.98-WRC (a) (HRMB) Project No: NA

Field ID: SP-DOE-98 84492-8740
Descr/Location:

Sample Date: 09/23/98
Sample Time: 1210
Lab Samp ID: 985638008

Basis: Not Filtered
Matrix: Surface Water

Analyte	Detection Limit	Reporting Limit		Note	Result	Units	Dil	Prep Method	Analysis Method	Analysis Date	QC Batch
Bromide	0.0988	0.100	PQL		ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Chloride	0.0609	0.200	PQL		2.09	MG/L	1	NONE	E300	09/29/98	1564WXX
Fluoride	0.0709	0.100	PQL		0.426	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrate (as N)	0.0062	0.100	PQL		0.295	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrite	0.0438	0.100	PQL	CI	ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Sulfate	0.0542	0.200	PQL		2.02	MG/L	1	NONE	E300	09/29/98	1564WXX

CI: See narrative

Approved _____ Da _____

CT&E Environmental Services, Inc., Anchorage, AK

Lab Report No.: 985638 Date: 10/04/98

Project Name: NMED 9.98-WRC (a) (HRMB)

Project No: NA

Field ID: SP-9B-98 84492-8741

Descr/Location:

Sample Date: 09/23/98

Sample Time: 1430

Lab Samp ID: 985638009

Basis: Not Filtered

Matrix: Surface Water

Analyte	Detection Limit	Reporting Limit	Note	Result	Units	Dil	Prep Method	Analysis Method	Analysis Date	QC Batch
Bromide	0.0988	0.100 PQL		ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Chloride	0.0609	0.200 PQL		2.25	MG/L	1	NONE	E300	09/29/98	1564WXX
Fluoride	0.0709	0.100 PQL		0.437	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrate (as N)	0.0062	0.100 PQL		0.438	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrite	0.0438	0.100 PQL	CI	0.136	MG/L	1	NONE	E300	09/29/98	1564WXX
Sulfate	0.0542	0.200 PQL		2.27	MG/L	1	NONE	E300	09/29/98	1564WXX

CI: See narrative

Approved _____ Dat _____

CT&E Environmental Services, Inc., Anchorage, AK

Lab Report No.: 985638 Date: 10/04/98

Project Name: NMED 9.98-WRC (a) (HRMB)

Project No: NA

Field ID: SP-6-98 84492-8742

Descr/Location:

Sample Date: 09/23/98

Sample Time: 1100

Lab Samp ID: 985638010

Basis: Not Filtered

Matrix: Surface Water

Analyte	Detection Limit	Reporting Limit	Note	Result	Units	Dil	Prep Method	Analysis Method	Analysis Date	QC Batch
Bromide	0.0988	0.100 PQL		ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Chloride	0.0609	0.200 PQL		2.25	MG/L	1	NONE	E300	09/29/98	1564WXX
Fluoride	0.0709	0.100 PQL		0.323	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrate (as N)	0.0062	0.100 PQL		0.417	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrite	0.0438	0.100 PQL	CI	ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Sulfate	0.0542	0.200 PQL		2.64	MG/L	1	NONE	E300	09/29/98	1564WXX

CI: See narrative

Approved b _____ Date. _____

Lab Report No.: 985638 Date: 10/04/98

Project Name: NMED 9.98-WRC (a) (HRMB)

Project No: NA

Field ID: SP-ANCHO-98 84492-8743

Descr/Location:

Sample Date: 09/24/98

Sample Time: 1230

Lab Samp ID: 985638011

Basis: Not Filtered

Matrix: Surface Water

Analyte	Detection Limit	Reporting Limit		Note	Result	Units	Dil	Prep Method	Analysis Method	Analysis Date	QC Batch
Bromide	0.0988	0.100	PQL		ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Chloride	0.0609	0.200	PQL		2.15	MG/L	1	NONE	E300	09/29/98	1564WXX
Fluoride	0.0709	0.100	PQL		0.331	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrate (as N)	0.0062	0.100	PQL		0.322	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrite	0.0438	0.100	PQL	CI	ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Sulfate	0.0542	0.200	PQL		2.47	MG/L	1	NONE	E300	09/29/98	1564WXX

CI: See narrative

Approved _____ Da' _____

CT&E Environmental Services, Inc., Anchorage, AK

Lab Report No.: 985638 Date: 10/04/98

Project Name: NMED 9.98-WRC (a) (HRMB)

Project No: NA

Field ID: Rinsate 9-98 84492-8476

Descr/Location:

Sample Date: 09/21/98

Sample Time: 1900

Lab Samp ID: 985638012

Basis: Not Filtered

Matrix: Surface Water

Analyte	Detection Limit	Reporting Limit	Note	Result	Units	Dil	Prep Method	Analysis Method	Analysis Date	QC Batch
Bromide	0.0988	0.100 PQL		ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Chloride	0.0609	0.200 PQL		0.598	MG/L	1	NONE	E300	09/29/98	1564WXX
Fluoride	0.0709	0.100 PQL		ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrate (as N)	0.0062	0.100 PQL		0.192	MG/L	1	NONE	E300	09/29/98	1564WXX
Nitrogen, Nitrite	0.0438	0.100 PQL	CI	ND	MG/L	1	NONE	E300	09/29/98	1564WXX
Sulfate	0.0542	0.200 PQL		ND	MG/L	1	NONE	E300	09/29/98	1564WXX

CI: See narrative

Approved _____ Dat _____

QA/QC Report
Reagent Blank Summary

CT&E Environmental Services, Inc., Anchorage, AK

Lab Report No.: 985638 Date: 10/04/98

QC Batch: 1564WXX
Matrix: Surface Water
Lab Samp ID: 195145

Analyte	Detection Limit	Reporting Limit		Note	Result	Units	Dil	Prep Method	Analysis Method	Analysis Date
Nitrogen, Nitrate (as N)	0.1	0.1	PQL		0.145	MG/L	1	NONE	E300	09/29/98
Bromide	0.1	0.1	PQL		ND	MG/L	1	NONE	E300	09/29/98
Chloride	0.2	0.2	PQL		ND	MG/L	1	NONE	E300	09/29/98
Fluoride	0.1	0.1	PQL		ND	MG/L	1	NONE	E300	09/29/98
Nitrogen, Nitrite	0.1	0.1	PQL		ND	MG/L	1	NONE	E300	09/29/98
Sulfate	0.2	0.2	PQL		ND	MG/L	1	NONE	E300	09/29/98

QA/QC Report
Lab Duplicate Summary

CT&E Environmental Services, Inc., Anchorage, AK

Lab Report No.: 985638 Date: 10/04/98

QC Batch: 1564WXX
Matrix: Surface Water
Lab Samp ID: 195129
Basis: Not Filtered

Project Name: NMED 9.98-WRC (a) (HRMB)
Project No.: NA
Field ID: SP-9B-98 84492-8741
Lab Ref ID: 985638009

Analyte	Analysis Method	Detection Limit	Reporting Limit		Result	Duplicate Result	Units	Average	RPD	Acceptance Criteria
Bromide	E300	0.0988	0.100	PQL	ND	0.102	MG/L	NA	NA	NA
Chloride	E300	0.0609	0.200	PQL	2.25	2.16	MG/L	2.21	4.1	20LLR
Fluoride	E300	0.0709	0.100	PQL	0.437	0.408	MG/L	0.423	6.9	20LLR
Nitrogen, Nitrate (as N)	E300	0.0062	0.100	PQL	0.438	0.430	MG/L	0.434	1.8	20LLR
Nitrogen, Nitrite	E300	0.0438	0.100	PQL	0.136	ND	MG/L	NA	NA	NA
Sulfate	E300	0.0542	0.200	PQL	2.27	2.26	MG/L	2.27	0.4	20LLR

QA/QC Report
Lab Duplicate Summary

CT&E Environmental Services, Inc., Anchorage, AK

Lab Report No.: 985638 Date: 10/04/98

QC Batch: 1564WXX
Matrix: Surface Water
Lab Samp ID: 985638013
Basis: Not Filtered

Project Name: NMED 9.98-WRC (a) (HRMB)
Project No.: NA
Field ID: SP-ANCHO-98 84492-8743
Lab Ref ID: 985638011

Analyte	Analysis Method	Detection Limit	Reporting Limit		Result	Duplicate Result	Units	Average	RPD	Acceptance Criteria
Bromide	E300	0.0988	0.100	PQL	ND	ND	MG/L	NA	NA	NA
Chloride	E300	0.0609	0.200	PQL	2.15	2.29	MG/L	2.22	6.3	20LLR
Fluoride	E300	0.0709	0.100	PQL	0.331	0.334	MG/L	0.333	0.9	20LLR
Nitrogen, Nitrate (as N)	E300	0.0062	0.100	PQL	0.322	0.324	MG/L	0.323	0.6	20LLR
Nitrogen, Nitrite	E300	0.0438	0.100	PQL	ND	ND	MG/L	NA	NA	NA
Sulfate	E300	0.0542	0.200	PQL	2.47	2.46	MG/L	2.47	0.4	20LLR

CI: See narrative

QA/QC Report
Lab Duplicate Summary

CT&E Environmental Services, Inc., Anchorage, AK

Lab Report No.: 985638 Date: 10/04/98

QC Batch: 1564WXX
Matrix: Surface Water
Lab Samp ID: 985638014
Basis: Not Filtered

Project Name: NMED 9.98-WRC (a) (HRMB)
Project No.: NA
Field ID: SP-ANCHO-98 84492-8743
Lab Ref ID: 985638011

Analyte	Analysis Method	Detection Limit	Reporting Limit		Result	Duplicate Result	Units	Average	RPD	Acceptance Criteria
Bromide	E300	0.0988	0.100	PQL	ND	ND	MG/L	NA	NA	NA
Chloride	E300	0.0609	0.200	PQL	2.15	2.22	MG/L	2.19	3.2	20LLR
Fluoride	E300	0.0709	0.100	PQL	0.331	0.325	MG/L	0.328	1.8	20LLR
Nitrogen, Nitrate (as N)	E300	0.0062	0.100	PQL	0.322	0.312	MG/L	0.317	3.2	20LLR
Nitrogen, Nitrite	E300	0.0438	0.100	PQL	ND	ND	MG/L	NA	NA	NA
Sulfate	E300	0.0542	0.200	PQL	2.47	2.51	MG/L	2.49	1.6	20LLR

CI: See narrative

QA/QC Report
Matrix Spike/Duplicate Matrix Spike Summary

CT&E Environmental Services, Inc., Anchorage, AK

Lab Report No.: 985638 Date: 10/04/98

QC Batch: 1564WXX
Matrix: Surface Water
Lab Samp ID: 195130
Basis: Not Filtered

Project Name: NMED 9.98-WRC (a) (HRMB)
Project No.: NA
Field ID: SP-9B-98 84492-8741
Lab Ref ID: 985638009

Analyte	Analysis Method	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Units	% Recoveries MS	% Recoveries DMS	% Recoveries RPD	Acceptance Criteria % Rec	Acceptance Criteria % Rec	Acceptance Criteria RPD
Bromide	E300	20.	NA	ND	25.7	NA	MG/L	129!	NA	NA	110-90	MEA	NA
Chloride	E300	20.0	NA	2.25	26.9	NA	MG/L	123!	NA	NA	110-90	MEA	NA
Fluoride	E300	20.0	NA	0.437	23.3	NA	MG/L	114!	NA	NA	110-90	MEA	NA
Nitrogen, Nitrate (as N)	E300	4.51	NA	0.438	5.53	NA	MG/L	113!	NA	NA	110-90	MEA	NA
Nitrogen, Nitrite	E300	6.10	NA	0.136	6.92	NA	MG/L	111!	NA	NA	110-90	MEA	NA
Sulfate	E300	20.0	NA	2.27	26.8	NA	MG/L	123!	NA	NA	110-90	MEA	NA

CI: See narrative

QA/QC Report
Blank Spike/Duplicate Blank Spike Summary

CT&E Environmental Services, Inc., Anchorage, AK

Lab Report No.: 985638 Date: 10/04/98

QC Batch: 1564WXX
Matrix: Surface Water
Lab Samp ID: 195147

Analyte	Analysis Method	Spike Level LCS	Spike Level LCD	Spike Result LCS	Spike Result LCD	Units	% Recoveries LCS	% Recoveries LCD	% Recoveries RPD	Acceptance Criteria %Rec	Acceptance Criteria RPD
Bromide	E300	10.	NA	9.84	NA	MG/L	98.4	NA	NA	110-90 MEA	NA
Chloride	E300	10.	NA	9.30	NA	MG/L	93.0	NA	NA	110-90 MEA	NA
Fluoride	E300	10.	NA	9.64	NA	MG/L	96.4	NA	NA	110-90 MEA	NA
Nitrogen, Nitrate (as N)	E300	2.26	NA	2.05	NA	MG/L	90.7	NA	NA	110-90 MEA	NA
Nitrogen, Nitrite	E300	3.05	NA	2.91	NA	MG/L	95.4	NA	NA	110-90 MEA	NA
Sulfate	E300	10.	NA	9.86	NA	MG/L	98.6	NA	NA	110-90 MEA	NA

RunLog

PROJECT	HSN	SAMPLE TYPE	RUN DATE/TIME	RUN INST	DIL	ANAL BATCH	PREP BATCH	SEQ
	195145	CB	9/29/98 5:30:00 PM	DX1	1	1695WIC		1
	195146	CCV	9/29/98 5:41:00 PM	DX1	1	1695WIC		2
	195147	LCS	9/29/98 5:52:00 PM	DX1	1	1695WIC		3
985653	985653001	PS	9/29/98 6:04:00 PM	DX1	1	1695WIC	1564WXX	4
	195127	DUP	9/29/98 6:15:00 PM	DX1	1	1695WIC	1564WXX	5
	195128	MS	9/29/98 6:27:00 PM	DX1	1	1695WIC	1564WXX	6
985637	985637001	PS	9/29/98 6:38:00 PM	DX1	1	1695WIC	1564WXX	7
985624	985624001	PS	9/29/98 6:50:00 PM	DX1	10	1695WIC	1564WXX	8
985651	985651001	PS	9/29/98 7:01:00 PM	DX1	1	1695WIC	1564WXX	9
985638	985638014	BMSD	9/29/98 7:13:00 PM	DX1	1	1695WIC	1564WXX	10
985638	985638013	BMS	9/29/98 7:24:00 PM	DX1	1	1695WIC	1564WXX	11
985638	985638012	PS	9/29/98 7:36:00 PM	DX1	1	1695WIC	1564WXX	12
985638	985638011	PS	9/29/98 7:47:00 PM	DX1	1	1695WIC	1564WXX	13
	195135	CB	9/29/98 7:59:00 PM	DX1	1	1695WIC		14
	195136	CCV	9/29/98 8:10:00 PM	DX1	1	1695WIC		15
985638	985638009	PS	9/29/98 8:22:02 PM	DX1	1	1695WIC	1564WXX	16
	195129	DUP	9/29/98 8:33:00 PM	DX1	1	1695WIC	1564WXX	17
	195130	MS	9/29/98 8:45:00 PM	DX1	1	1695WIC	1564WXX	18
985638	985638005	PS	9/29/98 8:56:00 PM	DX1	1	1695WIC	1564WXX	19
985638	985638010	PS	9/29/98 9:07:00 PM	DX1	1	1695WIC	1564WXX	20
985638	985638007	PS	9/29/98 9:19:00 PM	DX1	1	1695WIC	1564WXX	21
985638	985638006	PS	9/29/98 9:30:00 PM	DX1	1	1695WIC	1564WXX	22
985638	985638004	PS	9/29/98 9:42:00 PM	DX1	1	1695WIC	1564WXX	23
985638	985638008	PS	9/29/98 9:53:00 PM	DX1	1	1695WIC	1564WXX	24
985638	985638003	PS	9/29/98 10:05:00 PM	DX1	1	1695WIC	1564WXX	25
	195137	CB	9/29/98 10:16:00 PM	DX1	1	1695WIC		26
	195138	CCV	9/29/98 10:28:00 PM	DX1	1	1695WIC		27
985638	985638002	PS	9/29/98 10:39:00 PM	DX1	1	1695WIC	1564WXX	28
985638	985638001	PS	9/29/98 11:14:00 PM	DX1	1	1695WIC	1564WXX	29
	195139	CB	9/29/98 11:25:00 PM	DX1	1	1695WIC		30
	195140	CCV	9/29/98 11:37:00 PM	DX1	1	1695WIC		31

CT&E Environmental Services Inc.

EP300 - Ion Chromotagraphy Run Log

Run Date : Sept 29, 98

Method : Test 11

Datafile : 092998

Schedule : 092998

Cal. Std Lot # :

LCS Std Lot # :

Cal Date :

Inj. #	Sample #	Dilution	
1	CB		
2	CCV		
3	ICS		
4 ✓	5653-01		
5	-01 Dup		195127
6	-01 Spk		195128
7 ✓	5637-01		
8 ✓	5624-01	X10	
9 ✓	5651-01		
10	5638-14		Dup & Spk
11	-13		
12	-12		
13	-11		
14	CB		
15	CCV		
16	5638-09		
17	-09 Dup		195129
18	-09 Spk		195130
19	-05		
20	-10		
21	-07		
22	-06		
23	-04		
24	-08		
25	-03		
26	CB		
27	CCV		
28	5638-02		
29	-02 Dup		
30	-02 Spk		
31	-01		
32	CB		
33	CCV		
34	Rinse		
35			
36			

Inj. #	Sample #	Dilution
37		
38		
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Batch # : WXX 1564 / ~~WXX 1694~~ 1695

Analyst :

Section 3.2

IC Calibration and LCS Standard Prep.

9/3/98 GG

Source : High Purity Standards Multi-Analyte Standard (LCS) - Method "Test 11"

Lot # :

Analyte LCS (QC)	Source Conc mg/L	Vol Initial mL	Vol Final mL	Final Conc. mg/L	Conversions
Fluoride	1000	1.000	100	10	
Chloride	1000	1.000	100	10	
Nitrite	1000	1.000	100	10	= 3.049 mg/L Nitrite - N
Bromide	1000	1.000	100	10	
Nitrate	1000	1.000	100	10	= 2.257 mg/L Nitrate - N
O-Phos.	1000	1.000	100	10	= 3.268 mg/L O-Phos - P
Sulfate	1000	1.000	100	10	

Conversions

Nitrite - N = Nitrite / 3.28
Nitrate - N = Nitrate / 4.43
O-Phos - P = O-Phos / 3.06

Source : AccuStandard Lot #

Fluoride	P-8-2
Chloride	P-8-3
Nitrite	P-8-4
Bromide	P-8-5
Nitrate	P-8-6
O-Phos	P-8-7
Sulfate	P-8-8

Analyte **Cal Std #4**	Source Conc mg/L	Vol Initial mL	Vol Final mL	Final Conc. mg/L	Conversions
Fluoride	1000	1.0	100	10	
Chloride	1000	2.0	100	20	
Nitrite-N	1000	1.0	100	10	=
Bromide	1000	1.0	100	10	
Nitrate-N	1000	1.0	100	10	=
O-Phos.-P	1000	2.0	100	20	=
Sulfate	1000	2.0	100	20	

Analyte **Cal Std #3**	Source Conc mg/L	Vol Initial mL	Vol Final mL	Final Conc. mg/L	Conversions
Fluoride	STD 4	5.0	10	5	
Chloride	STD 4	5.0	10	10	
Nitrite-N	STD 4	5.0	10	5	
Bromide	STD 4	5.0	10	5	
Nitrate-N	STD 4	5.0	10	5	
O-Phos.-P	STD 4	5.0	10	10	
Sulfate	STD 4	5.0	10	10	

Analyte **Cal Std #2**	Source Conc mg/L	Vol Initial mL	Vol Final mL	Final Conc. mg/L	Conversions
Fluoride	STD 3	0.5	5	0.5	
Chloride	STD 3	0.5	5	1	
Nitrite-N	STD 3	0.5	5	0.5	
Bromide	STD 3	0.5	5	0.5	
Nitrate-N	STD 3	0.5	5	0.5	
O-Phos.-P	STD 3	0.5	5	1	
Sulfate	STD 3	0.5	5	1	

Analyte **Cal Std #1**	Source Conc mg/L (Std#2)	Vol Initial mL	Vol Final mL	Final Conc. mg/L	Conversions
Fluoride	STD 4	0.5	5	0.1	
Chloride	STD 4	0.5	5	0.2	
Nitrite-N	STD 4	0.5	5	0.1	
Bromide	STD 4	0.5	5	0.1	
Nitrate-N	STD 4	0.5	5	0.1	
O-Phos.-P	STD 4	0.5	5	0.2	
Sulfate	STD 4	0.5	5	0.2	

Matrix Spike Prep

Waters: 0.1mL of 1000mg/L LCS Std to 5mL of sample.
F. Cl. Br. SO4 = 20mg/L, NO2 = 6.10mg/L, NO3 = 4.51mg/L, O-Phos-P = 6.54mg/L

Soils: 0.4mL of 1000mg/L LCS Std to 2g sample, Final Vol. = 20mL
F. Cl. Br. SO4 = 20mg/Kg, NO2 = 6.10mg/Kg, NO3 = 4.51mg/Kg, O-Phos-P = 6.54mg/Kg

********** AUTOMATIC CALIBRATION UPDATE **********

Sa e Name: AUTOCAL1 Date: Thu Sep 03 13:23:27 1998
Ra ile : C:\DX\DATA\09039811.D05
Method : C:\DX\METHOD\TEST11.MET Calibration Level: 1
ACI Address: 1 System : 1 Inject#: 5 Detector: CDM-1

********** COMPONENTS FOUND IN THIS RUN **********

OMP NUM	COMPONENT NAME	OLD RET.TIME	MEASURED RET.TIME	NEW RET.TIME	OLD RESPONSE	MEASURED RESPONSE	NEW RESPONSE
1	Fluoride	1.00	1.00	1.00	1.099e+004	8.176e+002	8.176e+002
2	Chloride	1.60	1.58	1.58	1.270e+004	1.245e+003	1.245e+003
3	nitrite	1.95	1.93	1.93	1.395e+004	1.416e+003	1.416e+003
4	Bromide	3.02	3.00	3.00	2.730e+003	2.500e+002	2.500e+002
5	Nitrate-N	3.47	3.47	3.47	1.562e+004	1.504e+003	1.504e+003
6	O-Phosphate-P	5.43	5.47	5.47	1.072e+004	7.748e+002	7.748e+002
7	Sulfate	7.30	7.30	7.30	9.148e+003	5.052e+002	5.052e+002

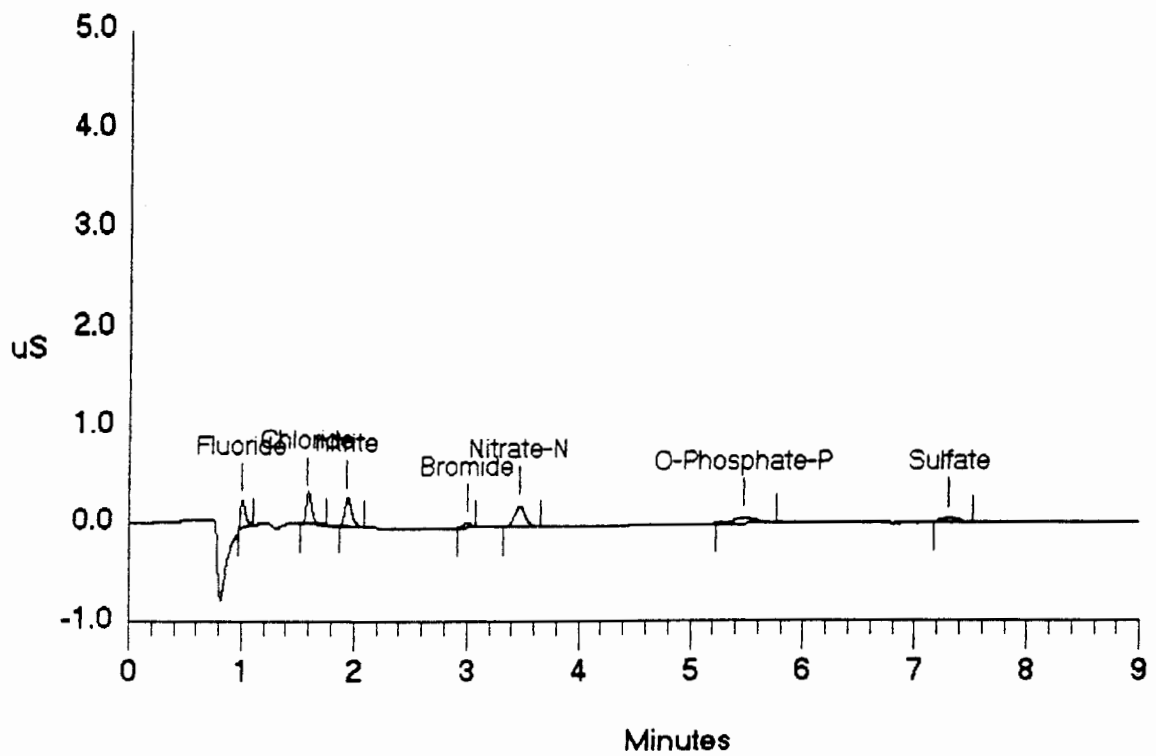
Sample Name: AUTOCAL1 Date: 09/03/1998 13:23:27
Dat- File : C:\DX\DATA\09039811.D05
Me : C:\DX\METHOD\TEST11.MET
ACI Address: 1 System: 1 Inject#: 5 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

ılibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
ɪternal	1	1	2700	5Hz	0.00	9.00		100

********** Peak Report: All Peaks **********

ᵖk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	0.100	256	818	1	0.00
2	1.58	Chloride	0.200	295	1245	3	-1.04
3	1.93	nitrite	0.100	291	1416	4	-0.85
4	3.00	Bromide	0.100	45	250	1	-0.55
5	3.47	Nitrate-N	0.100	222	1504	1	0.00
6	5.47	O-Phosphate-P	0.100	63	775	1	0.61
7	7.30	Sulfate	0.200	44	505	1	0.00
		Totals	0.900	1217	6513		

File: 09039811.D05 Sample: AUTOCAL1



********** AUTOMATIC CALIBRATION UPDATE **********

Sa : Name: AUTOCAL2 Date: Thu Sep 03 13:34:55 1998
Raw File : C:\DX\DATA\09039811.D06
Method : C:\DX\METHOD\TEST11.MET Calibration Level: 2
ACI Address: 1 System : 1 Inject#: 6 Detector: CDM-1

********** COMPONENTS FOUND IN THIS RUN **********

OMP NUM	COMPONENT NAME	OLD RET.TIME	MEASURED RET.TIME	NEW RET.TIME	OLD RESPONSE	MEASURED RESPONSE	NEW RESPONSE
1	Fluoride	1.00	1.00	1.00	4.542e+003	4.873e+003	4.873e+003
2	Chloride	1.58	1.60	1.60	7.149e+003	6.422e+003	6.422e+003
3	nitrite	1.93	1.95	1.95	6.576e+003	6.981e+003	6.981e+003
4	Bromide	3.00	3.02	3.02	1.255e+003	1.347e+003	1.347e+003
5	Nitrate-N	3.47	3.48	3.48	7.500e+003	7.774e+003	7.774e+003
6	O-Phosphate-P	5.47	5.43	5.43	5.094e+003	5.290e+003	5.290e+003
7	Sulfate	7.30	7.30	7.30	4.373e+003	4.575e+003	4.575e+003

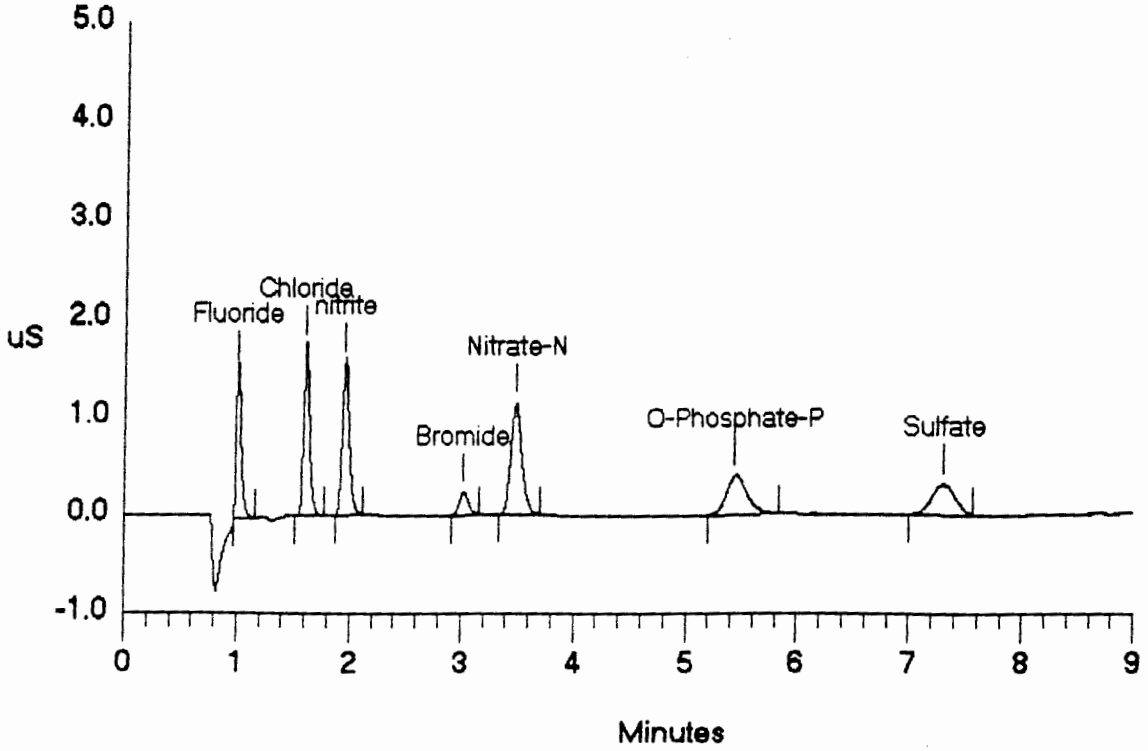
Sample Name: AUTOCAL2 Date: 09/03/1998 13:34:55
Data File : C:\DX\DATA\09039811.D06
Method : C:\DX\METHOD\TEST11.MET
Address: 1 System: 1 Inject#: 6 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

alibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
xternal	1	1	2700	5Hz	0.00	9.00		100

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	0.500	1492	4873	1	0.00
2	1.60	Chloride	1.000	1729	6422	1	1.05
3	1.95	nitrite	0.500	1548	6981	1	0.86
4	3.02	Bromide	0.500	226	1347	1	0.56
5	3.48	Nitrate-N	0.500	1130	7774	1	0.48
6	5.43	O-Phosphate-P	0.500	393	5290	1	-0.61
7	7.30	Sulfate	1.000	315	4575	1	0.00
		Totals	4.500	6833	37262		

File: 09039811.D06 Sample: AUTOCAL2



********** AUTOMATIC CALIBRATION UPDATE **********

Sa. Name: AUTOCAL3 Date: Thu Sep 03 13:46:22 1998

Raw File : C:\DX\DATA\09039801.D07

Method : C:\DX\METHOD\TEST11.MET Calibration Level: 3

ACI Address: 1 System : 1 Inject#: 7 Detector: CDM-1

********** COMPONENTS FOUND IN THIS RUN **********

)MP IUM	COMPONENT NAME	OLD RET.TIME	MEASURED RET.TIME	NEW RET.TIME	OLD RESPONSE	MEASURED RESPONSE	NEW RESPONSE
1	Fluoride	1.00	1.00	1.00	5.921e+004	5.955e+004	5.955e+004
2	Chloride	1.60	1.60	1.60	7.163e+004	7.219e+004	7.219e+004
3	nitrite	1.95	1.93	1.93	7.691e+004	7.668e+004	7.668e+004
4	Bromide	3.02	2.97	2.97	1.395e+004	1.392e+004	1.392e+004
5	Nitrate-N	3.48	3.37	3.37	8.738e+004	8.602e+004	8.602e+004
6	O-Phosphate-P	5.43	5.37	5.37	5.791e+004	5.783e+004	5.783e+004
7	Sulfate	7.30	7.27	7.27	4.634e+004	4.590e+004	4.590e+004

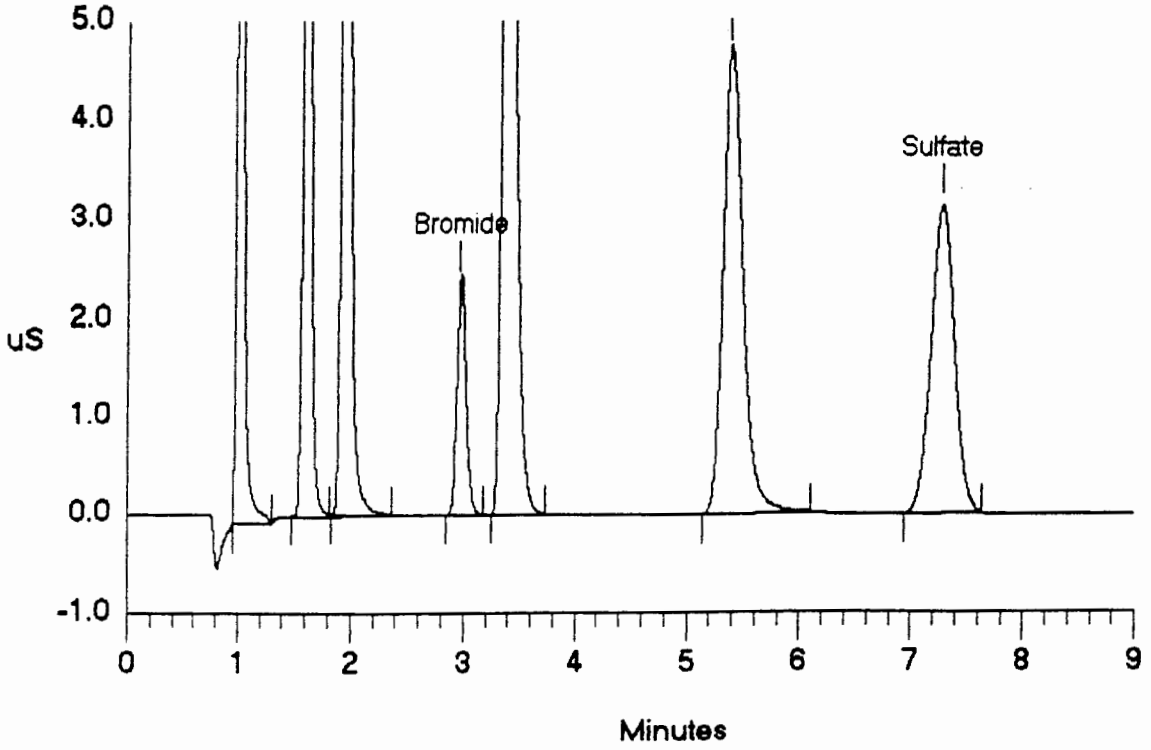
Sample Name: AUTOCAL3 Date: 09/03/1998 13:46:22
Da File : C:\DX\DATA\09039801.D07
Me d : C:\DX\METHOD\TEST11.MET
ACI Address: 1 System: 1 Inject#: 7 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

alibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
xternal	1	1	2700	5Hz	0.00	9.00		100

********** Peak Report: All Peaks **********

?k. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	5.000	18400	59548	1	0.00
2	1.60	Chloride	10.000	20228	72189	3	0.00
3	1.93	nitrite	5.000	15809	76677	4	-0.85
4	2.97	Bromide	5.000	2372	13925	1	-1.66
5	3.37	Nitrate-N	5.000	11911	86020	1	-3.35
6	5.37	O-Phosphate-P	5.000	4667	57830	1	-1.23
7	7.27	Sulfate	10.000	3126	45903	1	-0.46
		Totals	45.000	76512	412091		

File: 09039801.D07 Sample: AUTOCAL3



********** AUTOMATIC CALIBRATION UPDATE **********

Sa e Name: AUTOCAL4 Date: Thu Sep 03 13:57:50 1998
Raw File : C:\DX\DATA\09039801.D08
Method : C:\DX\METHOD\TEST11.MET Calibration Level: 4
ACI Address: 1 System : 1 Inject#: 8 Detector: CDM-1

********** COMPONENTS FOUND IN THIS RUN **********

OMP NUM	COMPONENT NAME	OLD RET.TIME	MEASURED RET.TIME	NEW RET.TIME	OLD RESPONSE	MEASURED RESPONSE	NEW RESPONSE
1	Fluoride	1.00	1.00	1.00	1.235e+005	1.223e+005	1.223e+005
2	Chloride	1.60	1.60	1.60	1.634e+005	1.605e+005	1.605e+005
3	nitrite	1.93	1.95	1.95	1.645e+005	1.675e+005	1.675e+005
4	Bromide	2.97	2.93	2.93	2.899e+004	2.892e+004	2.892e+004
5	Nitrate-N	3.37	3.30	3.30	1.898e+005	1.888e+005	1.888e+005
6	O-Phosphate-P	5.37	5.33	5.33	1.274e+005	1.264e+005	1.264e+005
7	Sulfate	7.27	7.27	7.27	9.753e+004	9.746e+004	9.746e+004

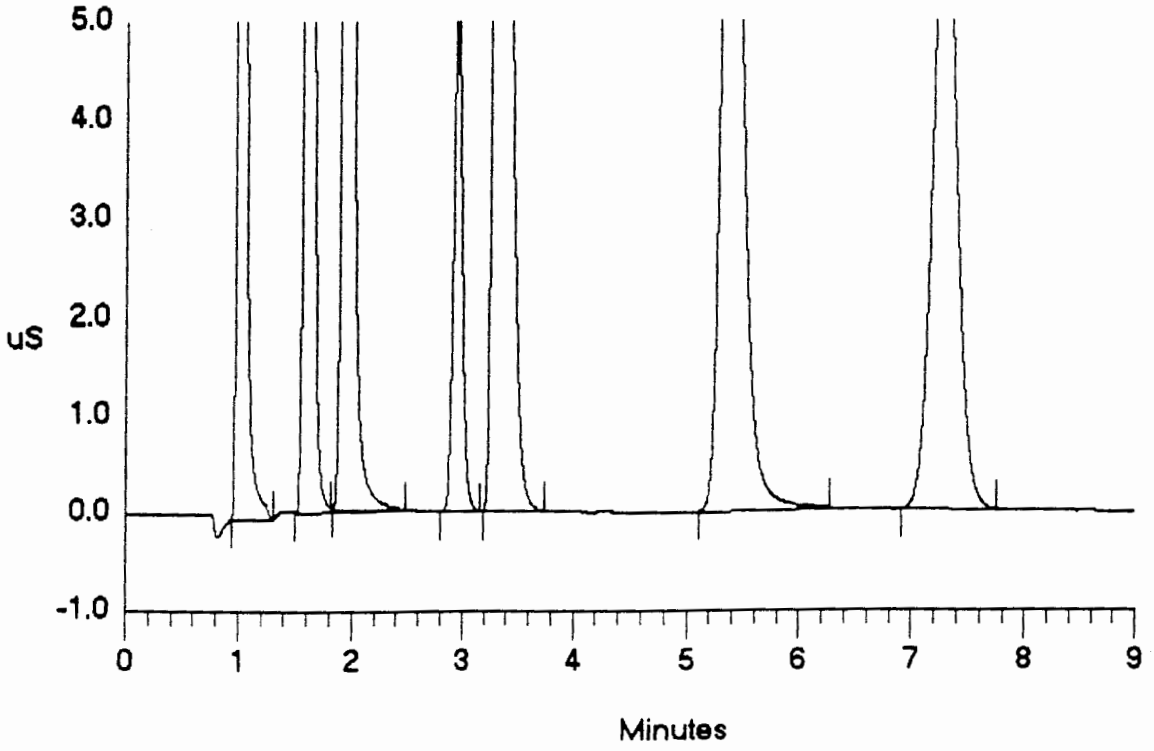
Sample Name: AUTOCAL4 Date: 09/03/1998 13:57:50
Data File : C:\DX\DATA\09039801.D08
Me 1 : C:\DX\METHOD\TEST11.MET
ACI Address: 1 System: 1 Inject#: 8 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

alibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
xternal	1	1	2700	5Hz	0.00	9.00	100

********** Peak Report: All Peaks **********

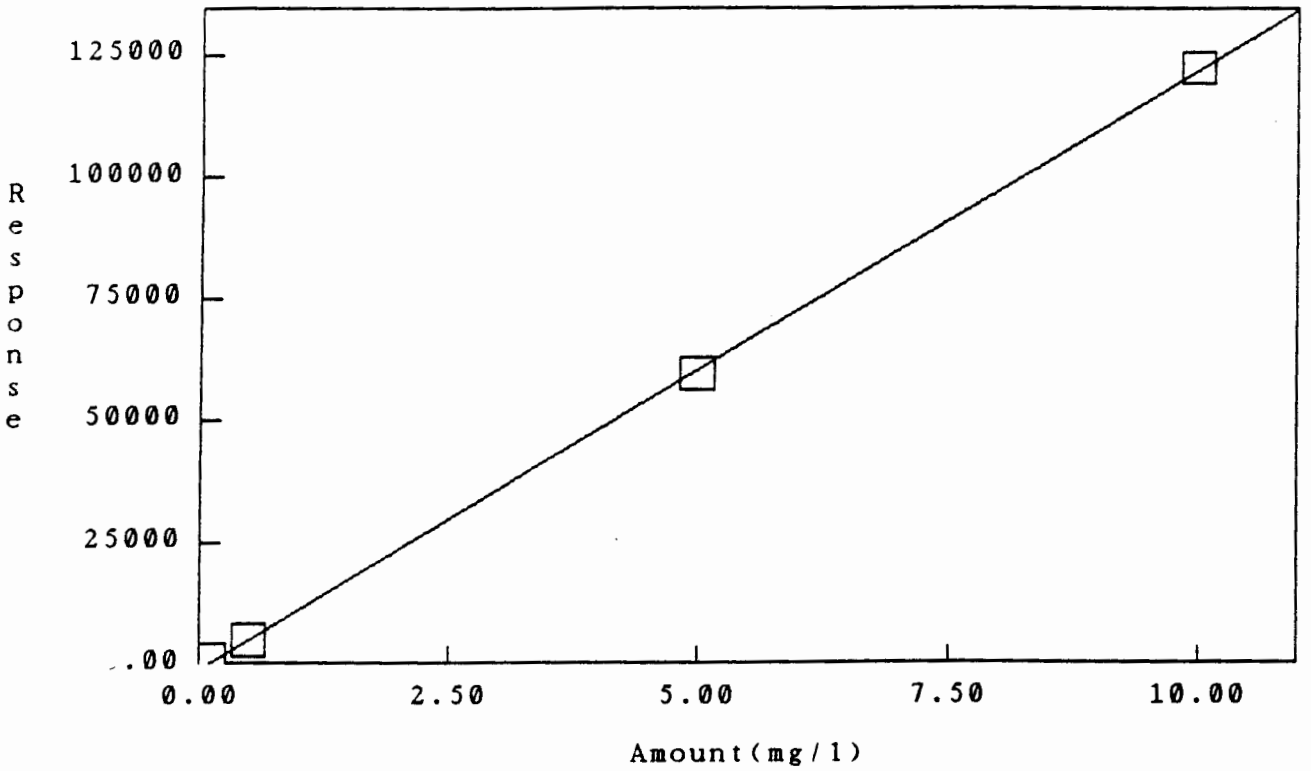
k. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	10.000	36361	122334	1	0.00
2	1.60	Chloride	20.000	37496	160471	3	0.00
3	1.95	nitrite	10.000	37069	167475	4	0.86
4	2.93	Bromide	10.000	4910	28924	1	-1.12
5	3.30	Nitrate-N	10.000	24487	188773	1	-1.98
6	5.33	O-Phosphate-P	10.000	10091	126371	1	-0.62
7	7.27	Sulfate	20.000	6654	97457	1	0.00
		Totals	90.000	157068	891806		

File: 09039801.D08 Sample: AUTOCAL4



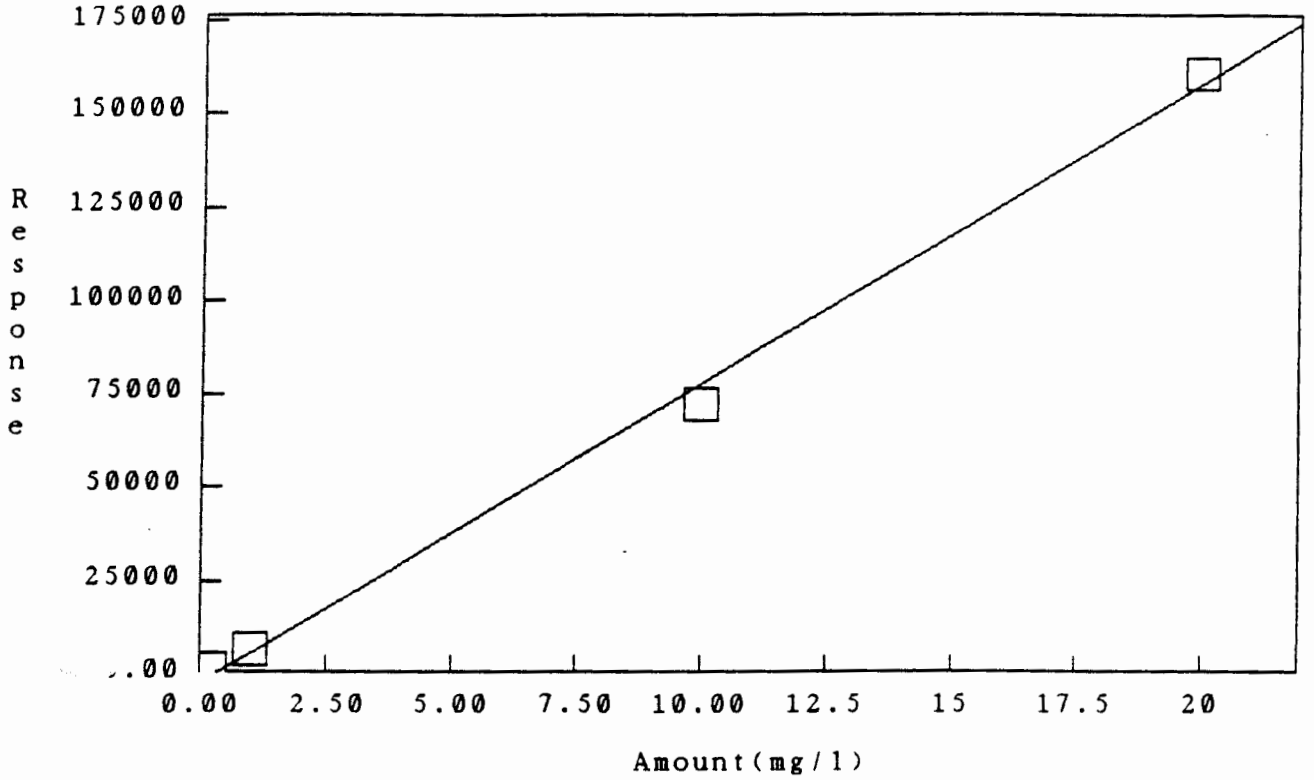
-Method Updated: 13:57 on Thu, 03 Sep 1998

Component: Fluoride
Fit Type: Linear
r^2 = 0.999855
Amt = Resp * 8.132e-005 + 0.08666
Resp = Amt * 1.23e+004 + -1066
Standardization: External
Calibration: Area



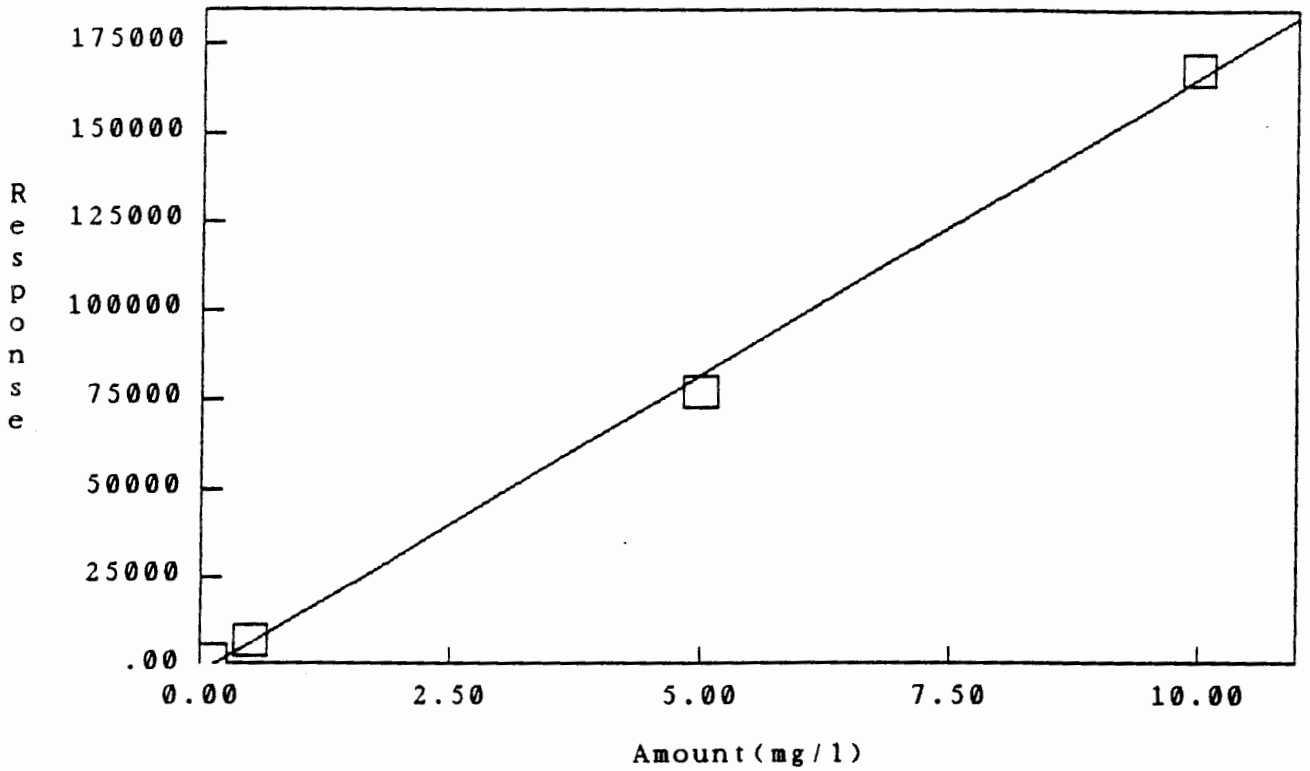
-Method Updated: 13:57 on Thu, 03 Sep 1998

Component: Chloride
Fit Type: Linear
r^2 = 0.997444
Amt = Resp * 0.0001246 + 0.3162
Resp = Amt * 8028 + -2539
Standardization: External
Calibration: Area



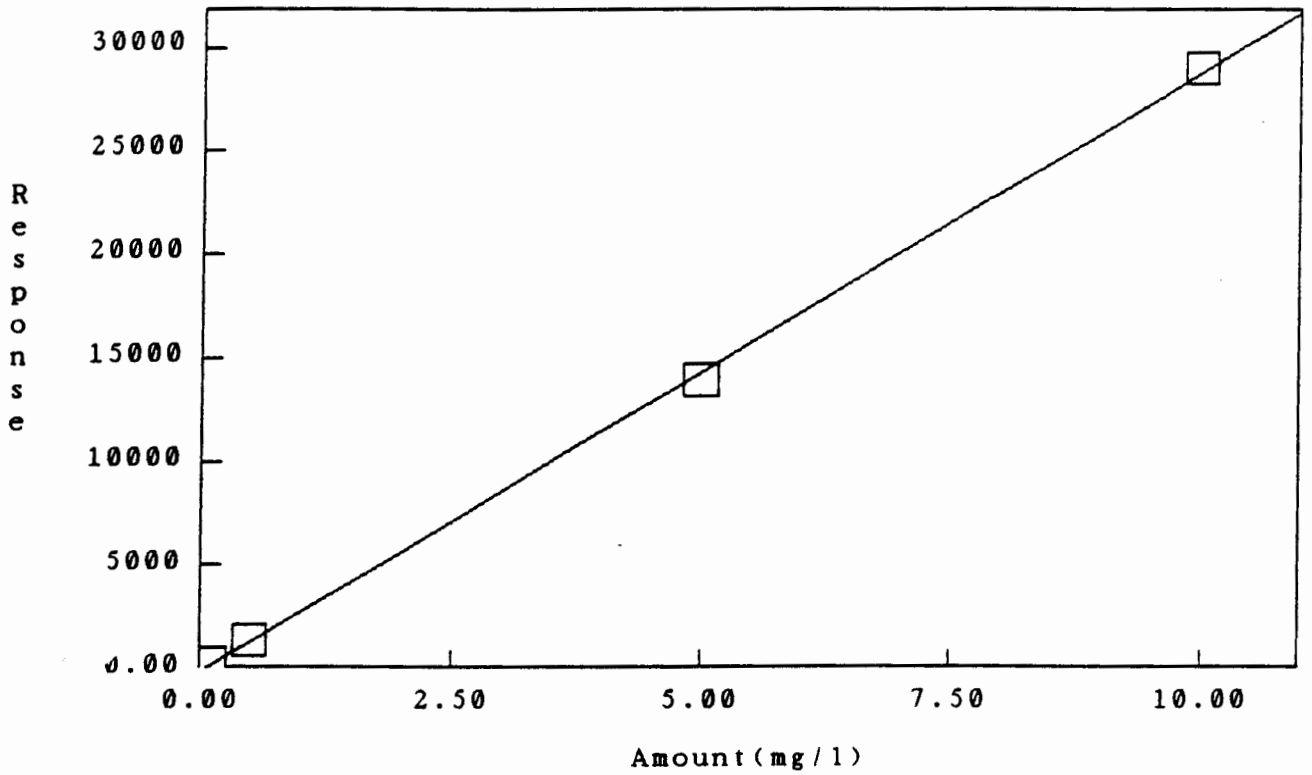
-Method Updated: 13:57 on Thu, 03 Sep 1998

Component: nitrite
Fit Type: Linear
r^2 = 0.998180
Amt = Resp * 5.971e-005 + 0.1298
Resp = Amt * 1.675e+004 + -2173
Standardization: External
Calibration: Area



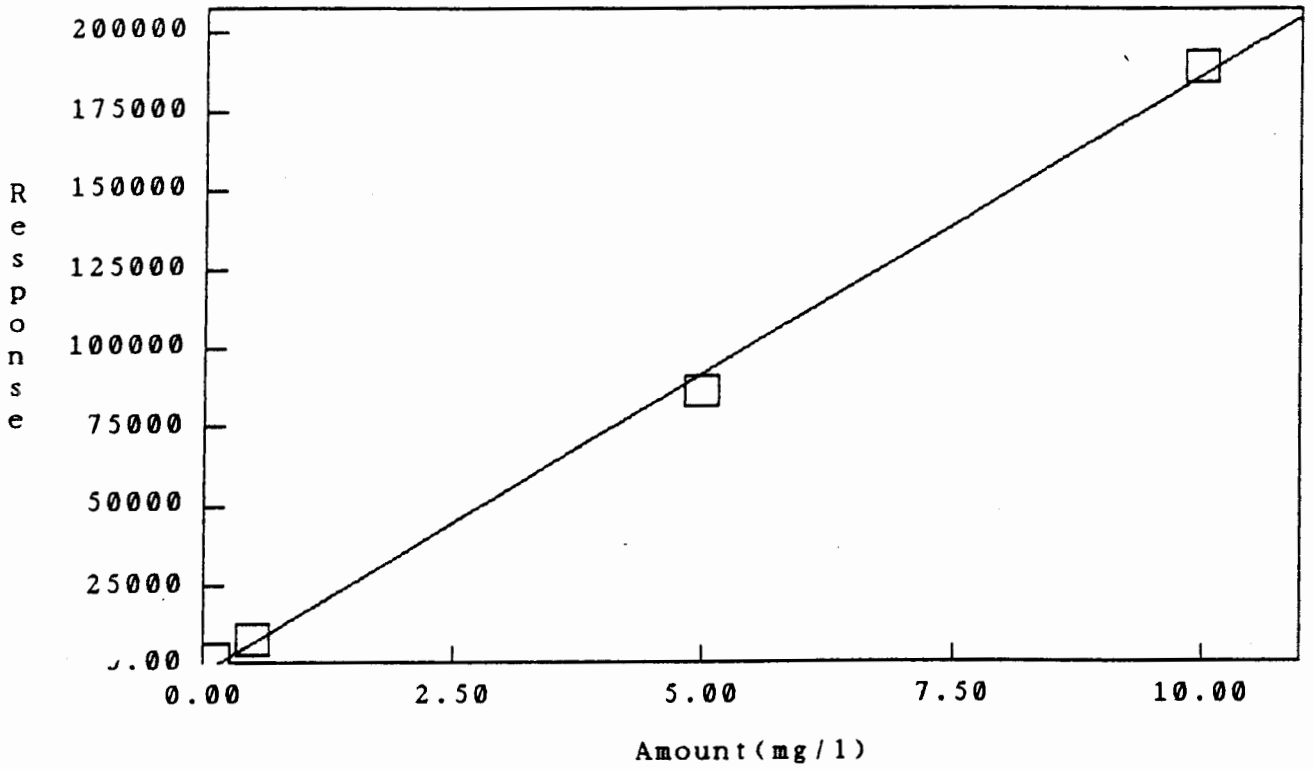
-Method Updated: 13:57 on Thu, 03 Sep 1998

Component: Bromide
Fit Type: Linear
r^2 = 0.999655
Amt = Resp * 0.0003458 + 0.05757
Resp = Amt * 2892 + -166.5
Standardization: External
Calibration: Area



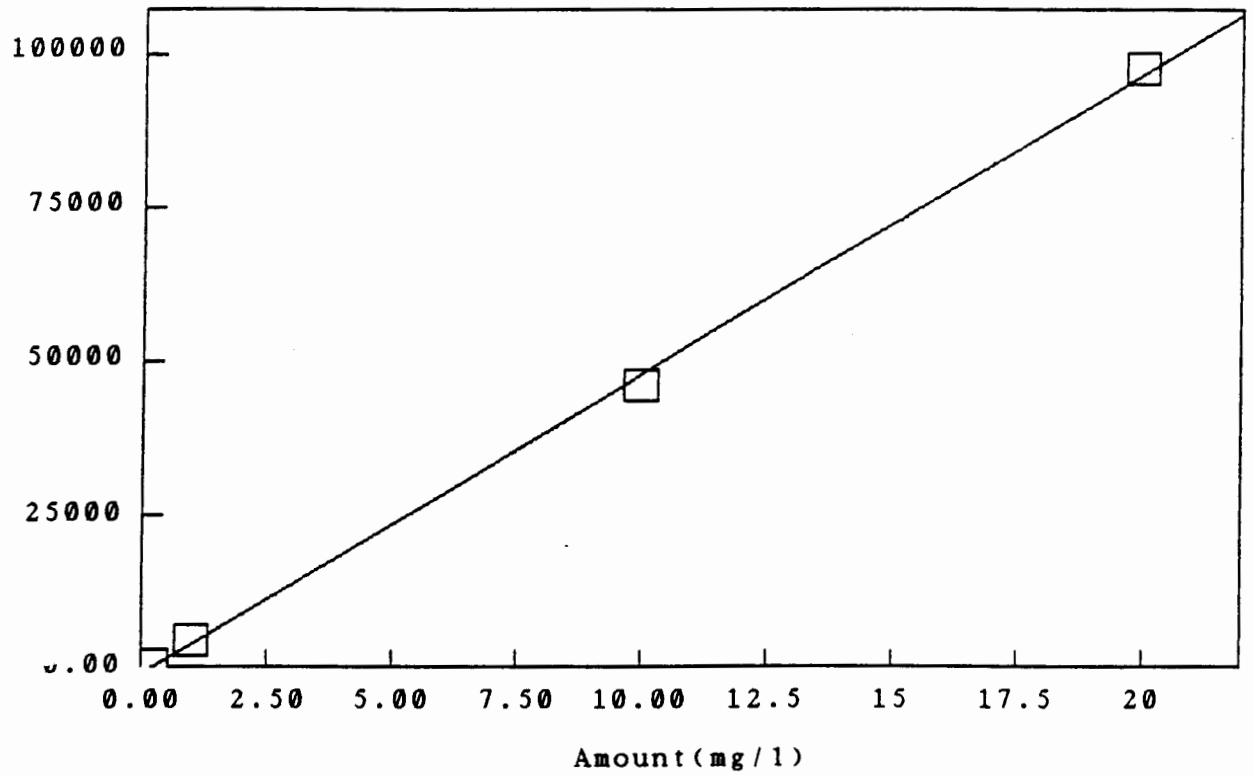
-Method Updated: 13:57 on Thu, 03 Sep 1998

Component: Nitrate-N
Fit Type: Linear
r^2 = 0.998005
Amt = Resp * 5.296e-005 + 0.139
Resp = Amt * 1.888e+004 + -2624
Standardization: External
Calibration: Area



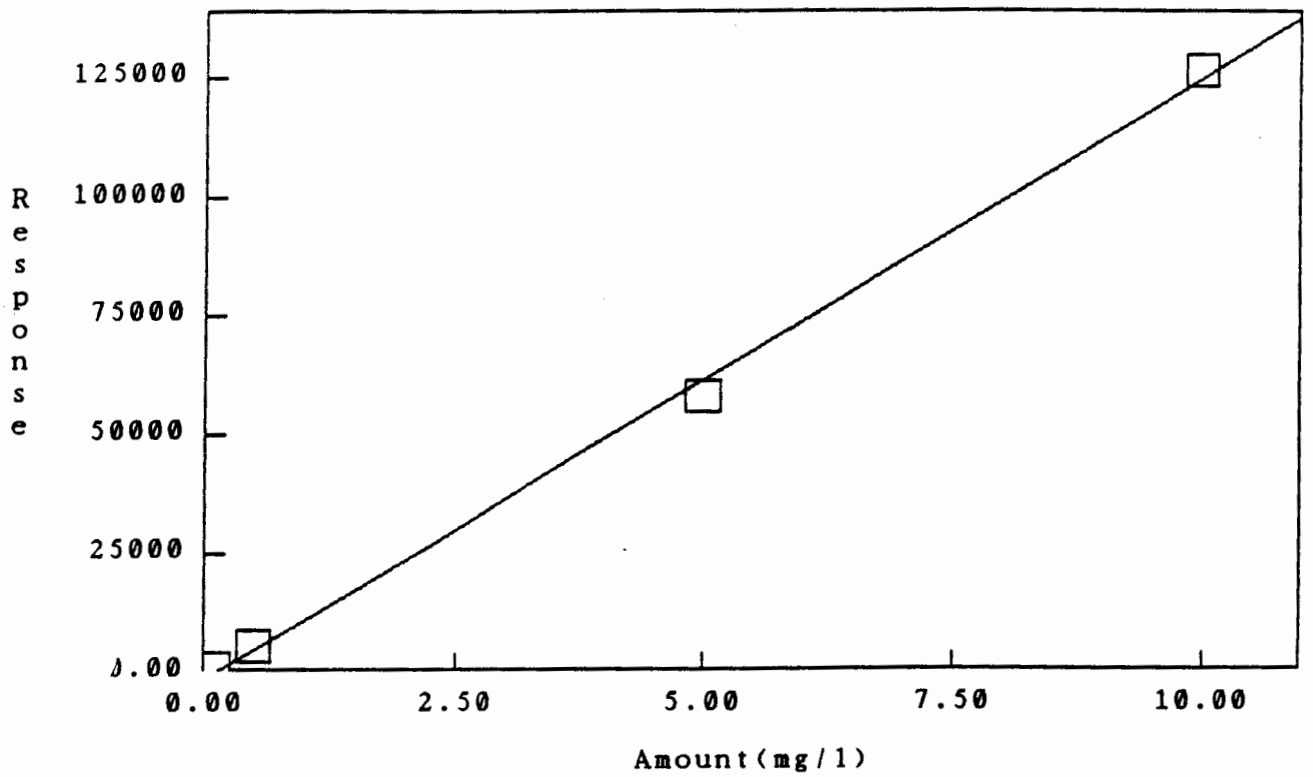
Method: C:\DX\METHOD\TEST11.MET

Component: Sulfate
Fit Type: Linear
r^2 = 0.999172
Amt = Resp * 0.0002052 + 0.1869
Resp = Amt * 4874 + -910.8
Standardization: External
Calibration: Area



-Method Updated: 13:57 on Thu, 03 Sep 1998

Component: O-Phosphate-P
Fit Type: Linear
r^2 = 0.998235
Amt = Resp * 7.904e-005 + 0.1401
Resp = Amt * 1.265e+004 + -1773
Standardization: External
Calibration: Area



Section 3.3

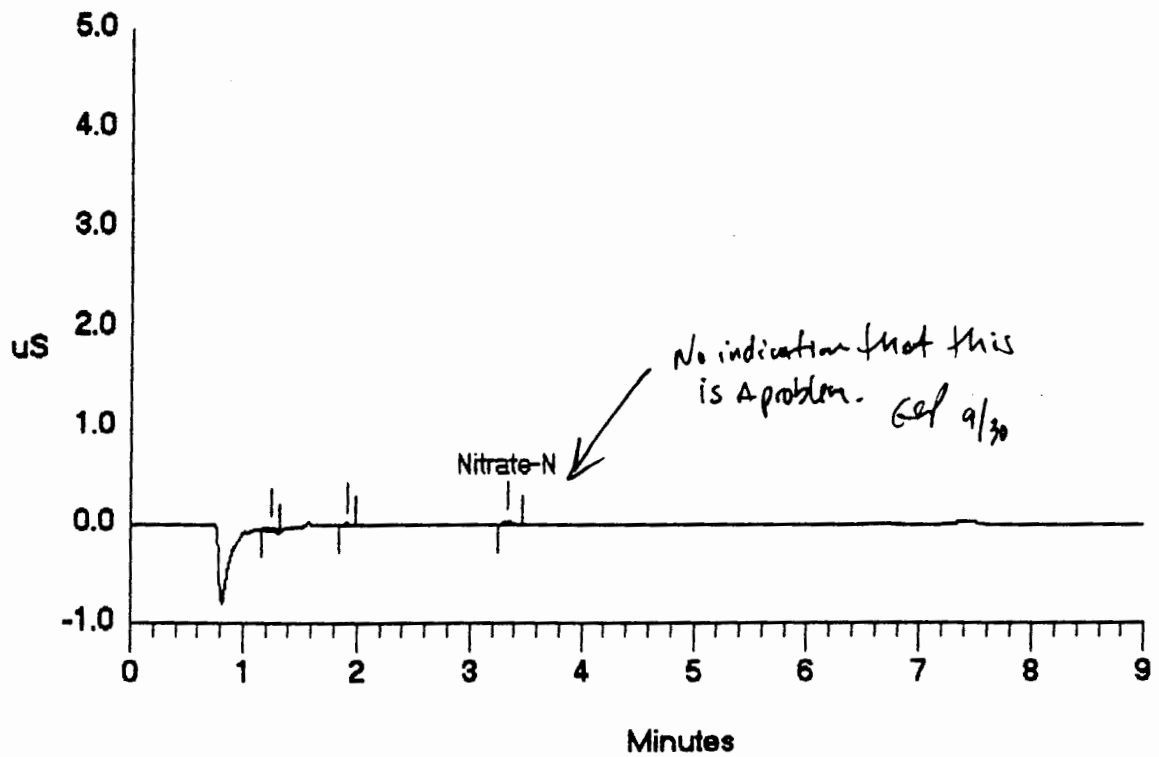
Sample Name: CB Date: 09/29/1998 17:30:01
Data File : C:\DX\DATA\09299801.D01
M d : C:\DX\METHOD\TEST11.MET
AC. Address: 1 System: 1 Inject#: 1 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

alibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
xternal	1	1	2700	5Hz	0.00	9.00		100

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.25		0.000	37	234	1	
3	3.33	Nitrate-N	0.145	30	122	1	1.01
		Totals	0.145	67	356		

File: 09299801.D01 Sample: CB



No indication that this is a problem. GEF 9/30

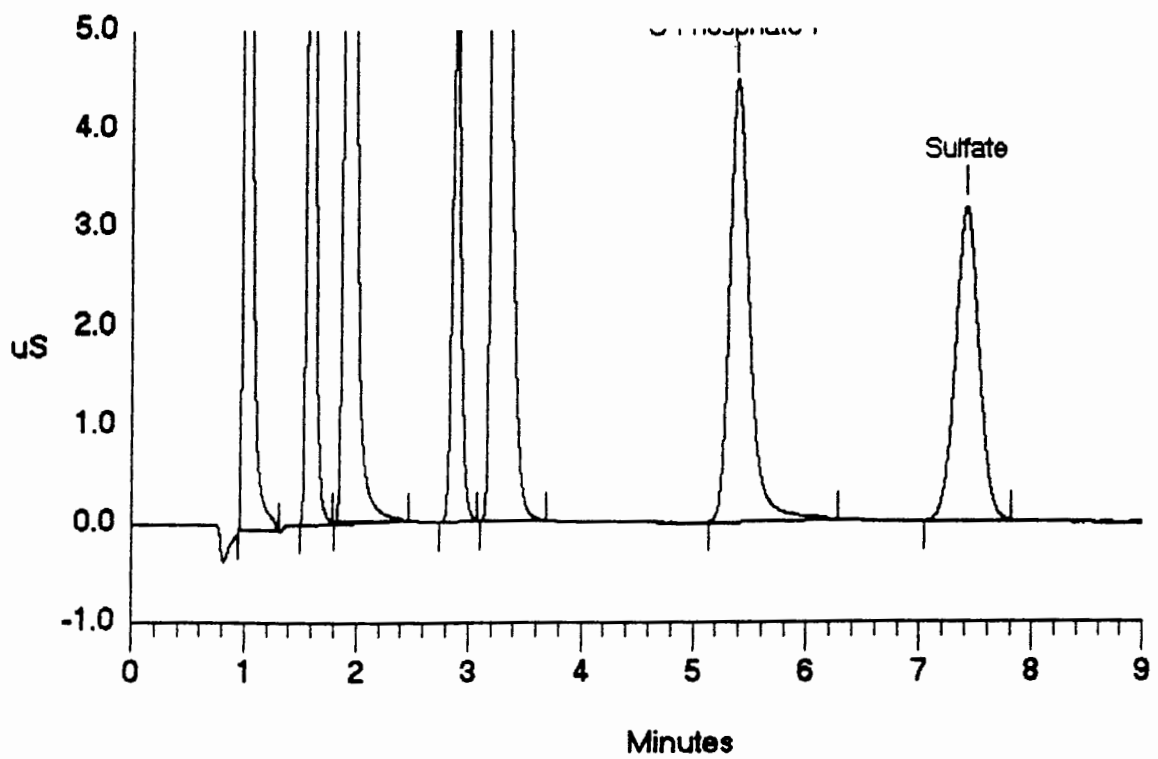
Sample Name: CCV Date: 09/29/1998 17:41:29
Data File : C:\DX\DATA\09299801.D02
Me d : C:\DX\METHOD\TEST11.MET
AC. .ddress: 1 System: 1 Inject#: 2 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

alibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
xternal	1	1	2700	5Hz	0.00	9.00	100

********** Peak Report: All Peaks **********

?k. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	9.533	36471	116169	1	0.00
2	1.58	Chloride	9.168	19605	71067	3	-1.04
3	1.92	nitrite	9.790	33069	161768	4	-1.71
4	2.88	Bromide	9.664	5302	27780	1	-1.70
5	3.22	Nitrate-N	9.656	23169	179714	1	-2.53
6	5.37	O-Phosphate-P	4.457	4434	54608	1	0.63
7	7.40	Sulfate	9.706	3180	46400	1	1.83
		Totals	61.975	125230	657506		

File: 09299801.D02 Sample: CCV



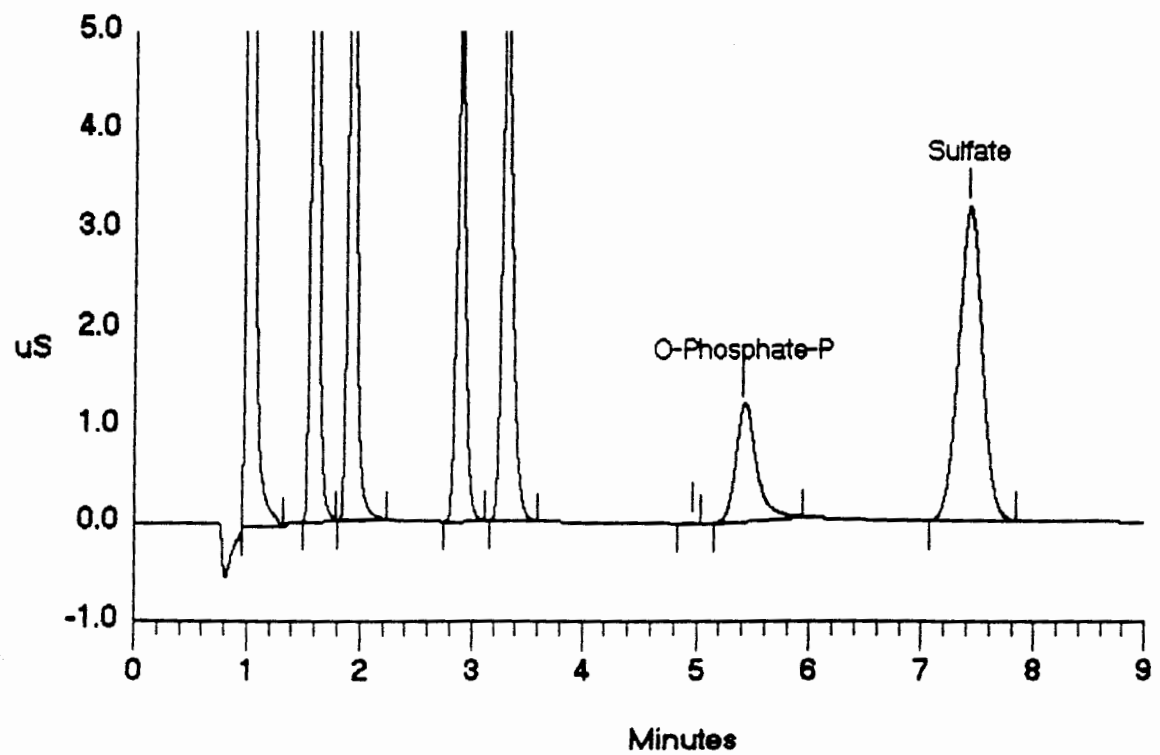
Sample Name: LCS Date: 09/29/1998 17:52:59
Data File : C:\DX\DATA\09299801.D03
Me : C:\DX\METHOD\TEST11.MET
ACl ..ddress: 1 System: 1 Inject#: 3 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

libration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
ternal	1	1	2700	5Hz	0.00	9.00	100

********** Peak Report: All Peaks **********

s. m	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	9.644	32650	117525	1	0.00
2	1.58	Chloride	9.298	20695	72110	3	-1.04
3	1.90	nitrite	2.909	9600	46549	4	-2.56
4	2.88	Bromide	9.838	5163	28284	1	-1.70
5	3.30	Nitrate-N	2.048	5553	36053	1	0.00
7	5.40	O-Phosphate-P	1.356	1181	15376	1	1.25
8	7.40	Sulfate	9.855	3186	47129	1	1.83
		Totals	44.949	78027	363026		

File: 09299801.D03 Sample: LCS



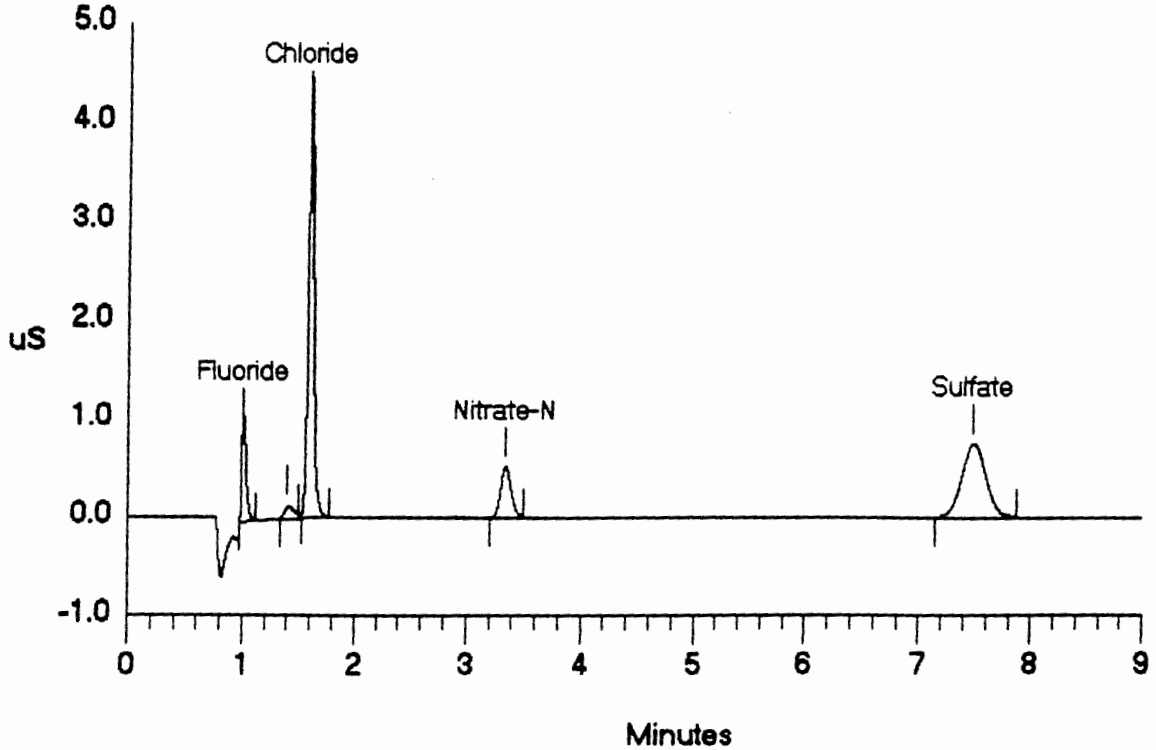
Sample Name: 5638-14 Date: 09/29/1998 19:13:15
Data File : C:\DX\DATA\09299801.D10
Method : C:\DX\METHOD\TEST11.MET
Address: 1 System: 1 Inject#: 10 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

alibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
xternal	1	1	2700	5Hz	0.00	9.00	100

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	0.325	950	2933	1	0.00
2	1.40		0.000	128	750	2	
3	1.58	Chloride	2.220	4109	15288	2	-1.04
4	3.33	Nitrate-N	0.312	510	3266	1	1.01
5	7.47	Sulfate	2.506	740	11306	1	2.75
		Totals	5.364	6438	33542		

File: 09299801.D10 Sample: 5638-14



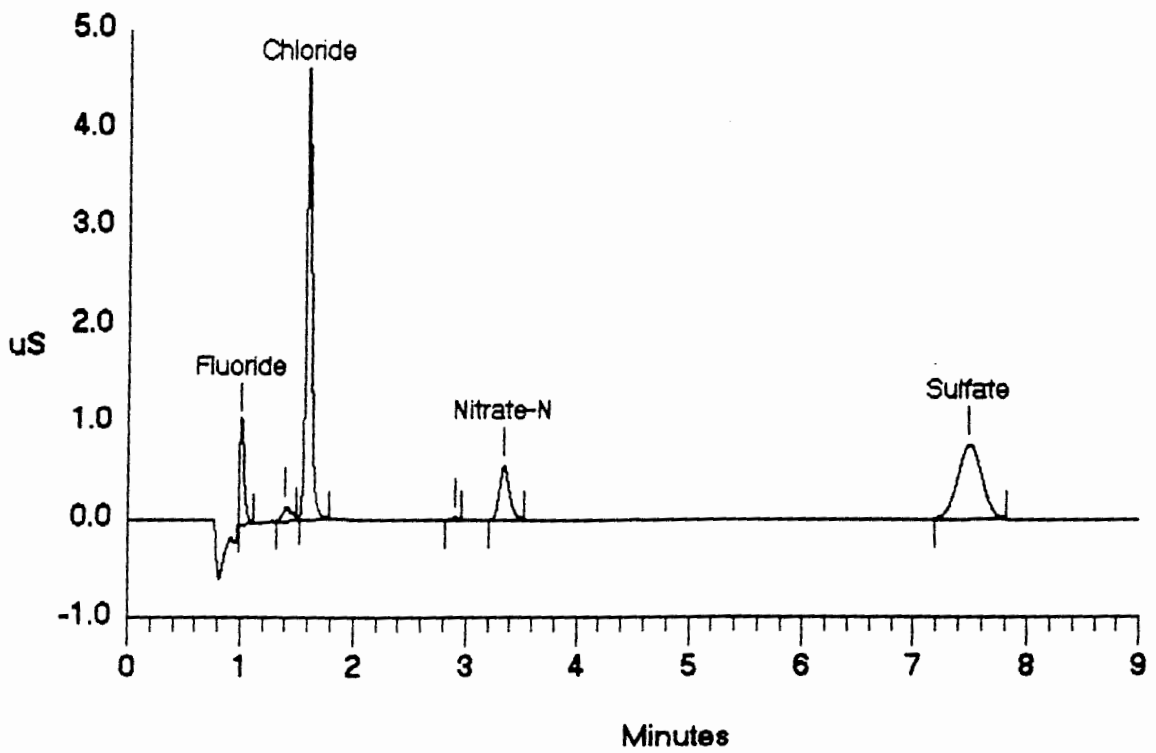
Sample Name: 5638-13 Date: 09/29/1998 19:24:43
Data File : C:\DX\DATA\09299801.D11
Method : C:\DX\METHOD\TEST11.MET
Address: 1 System: 1 Inject#: 11 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

alibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
xternal	1	1	2700	5Hz	0.00	9.00		100

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	0.334	1049	3036	1	0.00
2	1.40		0.000	136	827	2	
3	1.58	Chloride	2.287	4214	15819	2	-1.04
5	3.33	Nitrate-N	0.324	540	3490	1	1.01
6	7.47	Sulfate	2.462	745	11092	1	2.75
		Totals	5.406	6685	34264		

File: 09299801.D11 Sample: 5638-13



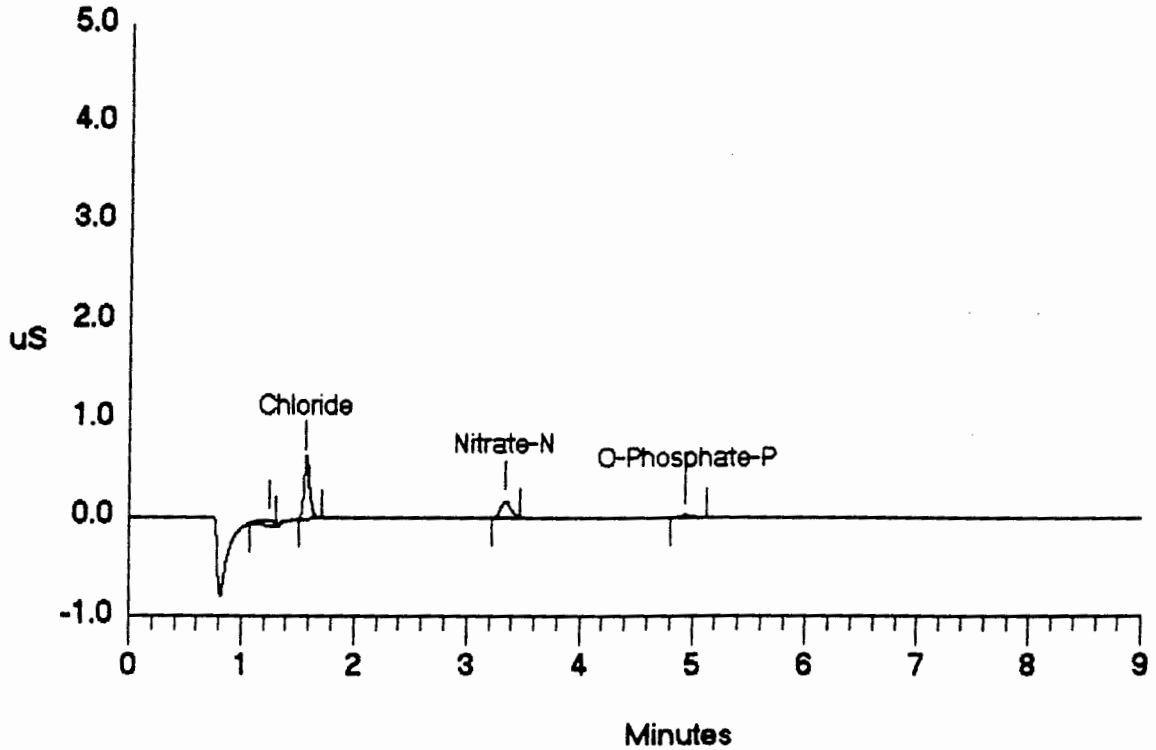
Sample Name: 5638-12 Date: 09/29/1998 19:36:12
Data File : C:\DX\DATA\09299801.D12
Me 1 : C:\DX\METHOD\TEST11.MET
AC. .ddress: 1 System: 1 Inject#: 12 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

alibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
cternal	1	1	2700	5Hz	0.00	9.00	100

********** Peak Report: All Peaks **********

'k. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.25		0.000	48	464	1	
2	1.57	Chloride	0.598	579	2263	1	-2.08
3	3.33	Nitrate-N	0.192	161	1002	1	1.01
4	4.93	O-Phosphate-P	0.152	22	150	1	-7.50
		Totals	0.942	810	3878		

File: 09299801.D12 Sample: 5638-12



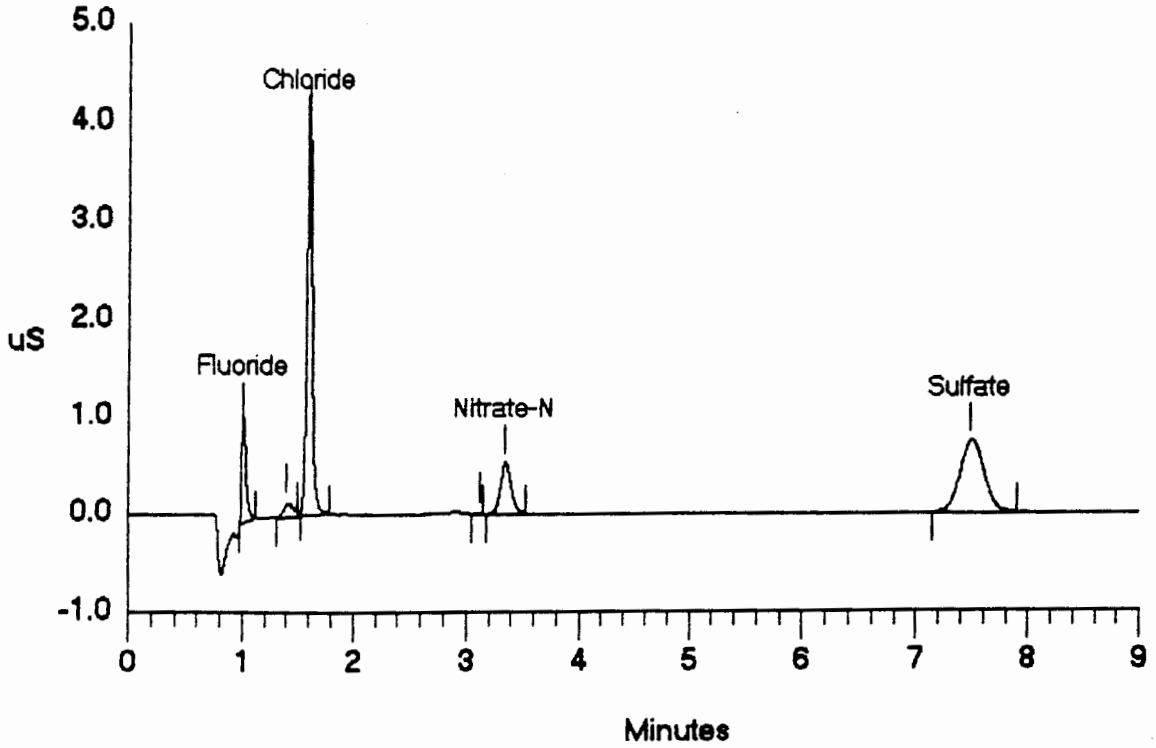
Sample Name: 5638-11 Date: 09/29/1998 19:47:40
Data File : C:\DX\DATA\09299801.D13
Me : C:\DX\METHOD\TEST11.MET
AC: Address: 1 System: 1 Inject#: 13 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

libration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
:ternal	1	1	2700	5Hz	0.00	9.00	100

********** Peak Report: All Peaks **********

k. um	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	0.331	1032	3009	1	0.00
2	1.40		0.000	134	859	2	
3	1.58	Chloride	2.151	3858	14728	2	-1.04
5	3.33	Nitrate-N	0.322	510	3448	1	1.01
6	7.47	Sulfate	2.473	720	11142	1	2.75
		Totals	5.276	6254	33186		

File: 09299801.D13 Sample: 5638-11



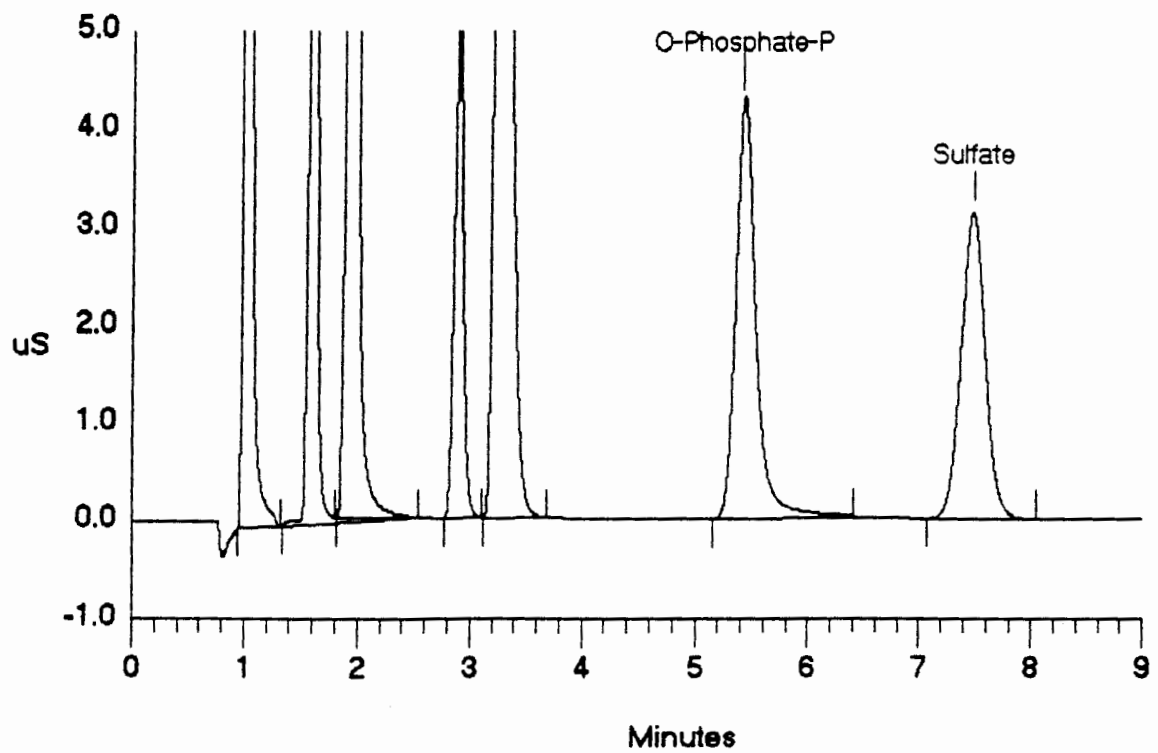
Sample Name: CCV Date: 09/29/1998 20:10:36
Data File : C:\DX\DATA\09299801.D15
Me : C:\DX\METHOD\TEST11.MET
ACl ıdress: 1 System: 1 Inject#: 15 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

libration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
ternal	1	1	2700	5Hz	0.00	9.00		100

********** Peak Report: All Peaks **********

c. ım	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	9.683	33580	118009	1	0.00
2	1.58	Chloride	9.356	18742	72571	3	-1.04
3	1.93	nitrite	9.652	36169	159461	4	-0.85
4	2.88	Bromide	9.812	5227	28207	1	-1.70
5	3.23	Nitrate-N	9.523	24477	177187	1	-2.02
6	5.40	O-Phosphate-P	4.366	4274	53464	1	1.25
7	7.47	Sulfate	9.799	3150	46854	1	2.75
		Totals	62.190	125618	655753		

File: 09299801.D15 Sample: CCV



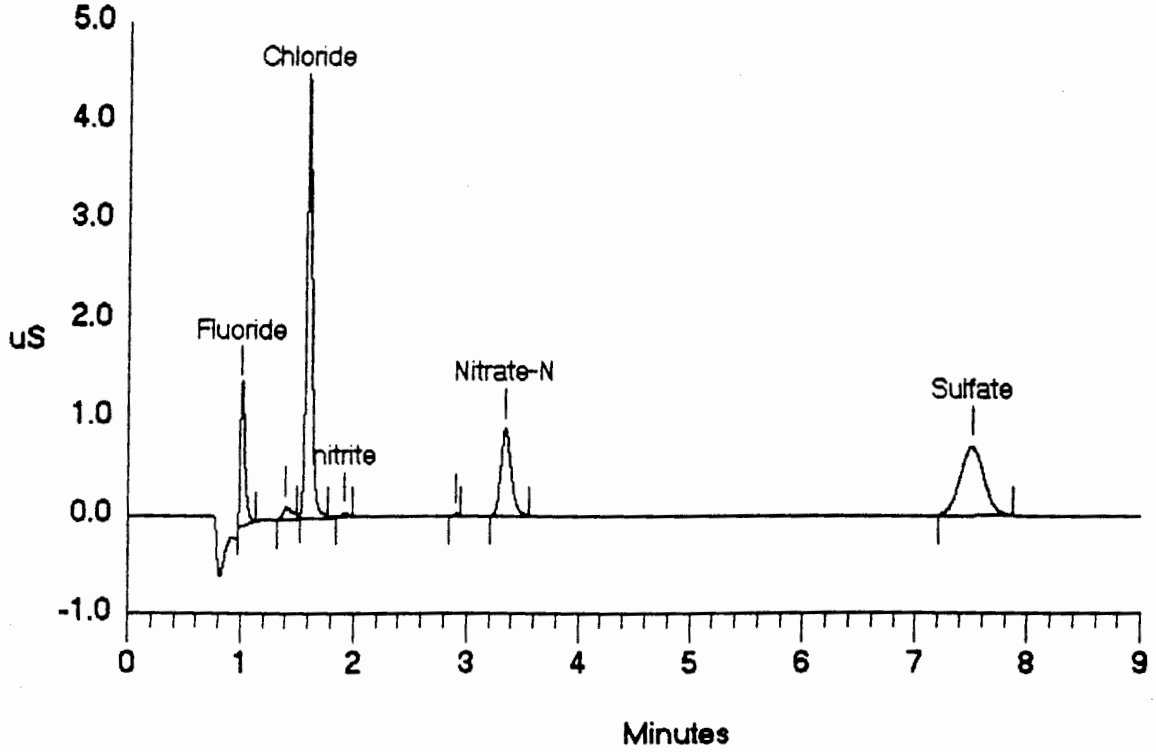
Sample Name: 5638-09 Date: 09/29/1998 20:22:05
Data File : C:\DX\DATA\09299801.D16
Me 1 : C:\DX\METHOD\TEST11.MET
AC. .ddress: 1 System: 1 Inject#: 16 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

ılibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
(ternal	1	1	2700	5Hz	0.00	9.00		100

********** Peak Report: All Peaks **********

'k. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	0.437	1420	4307	1	0.00
2	1.40		0.000	127	761	2	
3	1.58	Chloride	2.253	4106	15546	3	-1.04
4	1.92	nitrite	0.136	32	106	4	-1.71
6	3.33	Nitrate-N	0.438	870	5646	1	1.01
7	7.50	Sulfate	2.273	696	10169	1	3.21
		Totals	5.537	7251	36535		

File: 09299801.D16 Sample: 5638-09



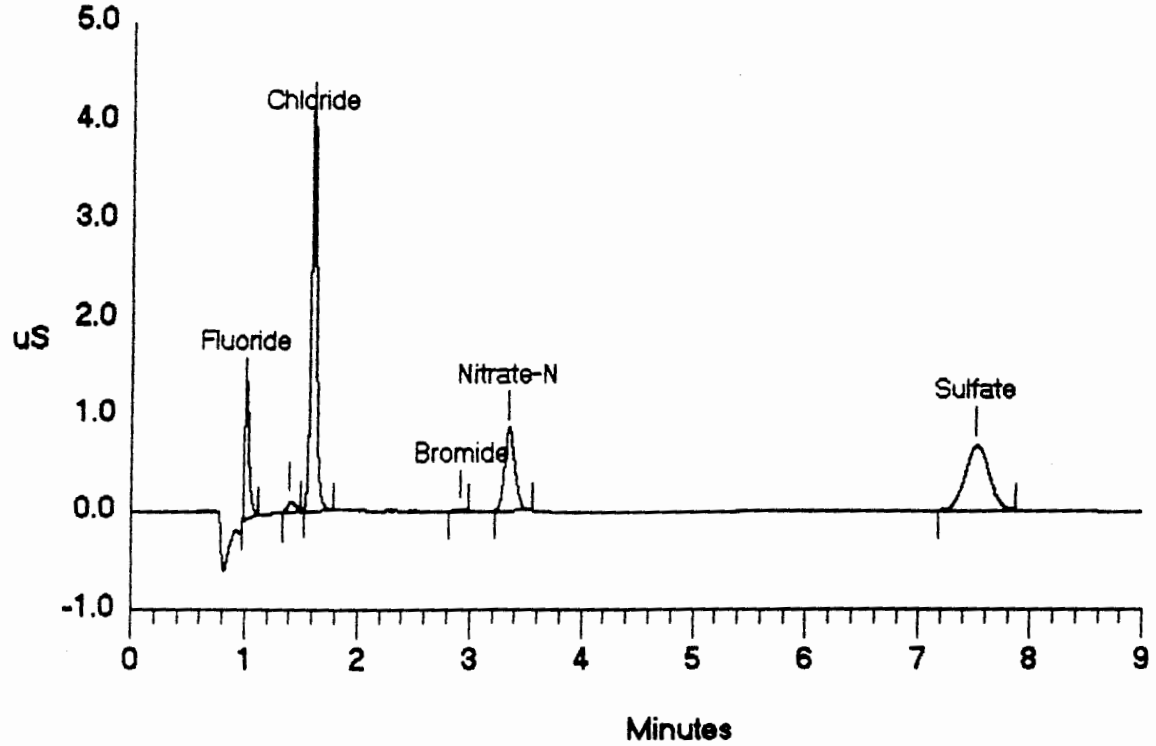
Sample Name: 5638-09 DUP Date: 09/29/1998 20:33:33
Data File : C:\DX\DATA\09299801.D17
Method : C:\DX\METHOD\TEST11.MET
A ddress: 1 System: 1 Inject#: 17 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

alibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
xternal	1	1	2700	5Hz	0.00	9.00	100

********** Peak Report: All Peaks **********

k. um	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	0.408	1269	3957	1	0.00
2	1.40		0.000	117	668	2	
3	1.58	Chloride	2.157	3624	14776	2	-1.04
4	2.92	Bromide	0.102	20	128	1	-0.57
5	3.33	Nitrate-N	0.430	827	5487	1	1.01
6	7.50	Sulfate	2.263	670	10118	1	3.21
		Totals	5.359	6527	35134		

File: 09299801.D17 Sample: 5638-09 DUP



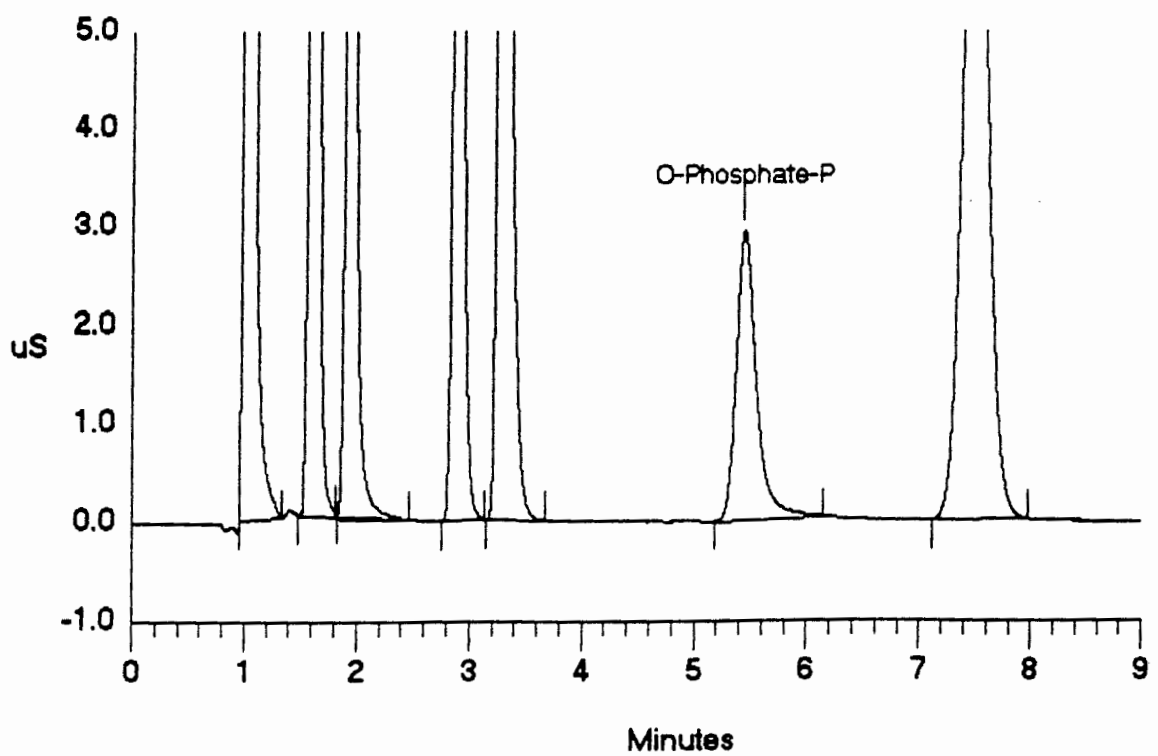
Sample Name: 5638-09 SPK Date: 09/29/1998 20:45:02
Data File : C:\DX\DATA\09299801.D18
M d : C:\DX\METHOD\TEST11.MET
AC. Address: 1 System: 1 Inject#: 18 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

alibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
xternal	1	1	2700	5Hz	0.00	9.00	100

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.02	Fluoride	23.300	84874	285460	1	1.67
2	1.62	Chloride	26.883	53734	213284	3	1.04
3	1.93	nitrite	6.922	26968	113752	4	-0.85
4	2.88	Bromide	25.655	13882	74023	1	-1.70
5	3.27	Nitrate-N	5.534	14671	101873	1	-1.01
6	5.43	O-Phosphate-P	3.021	2927	36452	1	1.88
7	7.43	Sulfate	26.763	8403	129544	1	2.29
		Totals	118.079	205460	954389		

File: 09299801.D18 Sample: 5638-09 SPK



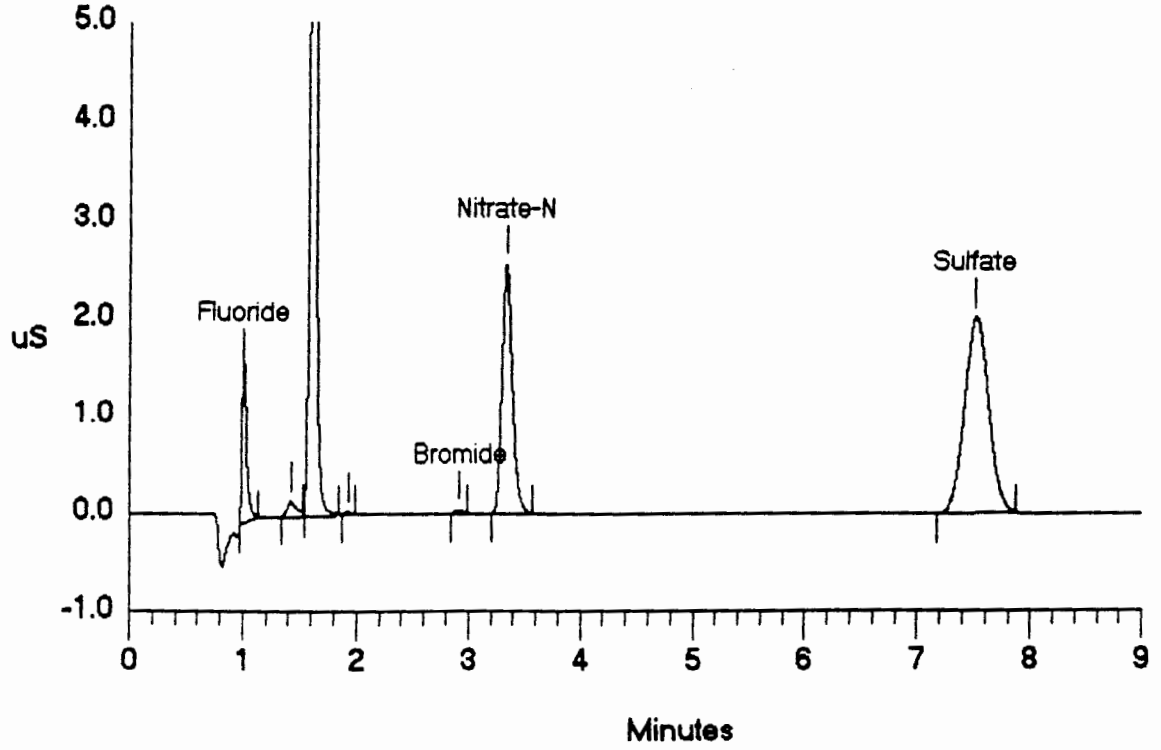
Sample Name: 5638-05 Date: 09/29/1998 20:56:31
Dat- File : C:\DX\DATA\09299801.D19
Me : C:\DX\METHOD\TEST11.MET
ACI Address: 1 System: 1 Inject#: 19 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

libration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
ternal	1	1	2700	5Hz	0.00	9.00		100

********** Peak Report: All Peaks **********

k. um	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	0.471	1580	4724	1	0.00
2	1.42		0.000	148	883	2	
3	1.60	Chloride	5.255	11728	39648	3	0.00
5	2.92	Bromide	0.106	31	140	1	-0.57
6	3.33	Nitrate-N	0.999	2541	16240	1	1.01
7	7.50	Sulfate	6.290	2002	29749	1	3.21
		Totals	13.121	18030	91384		

File: 09299801.D19 Sample: 5638-05



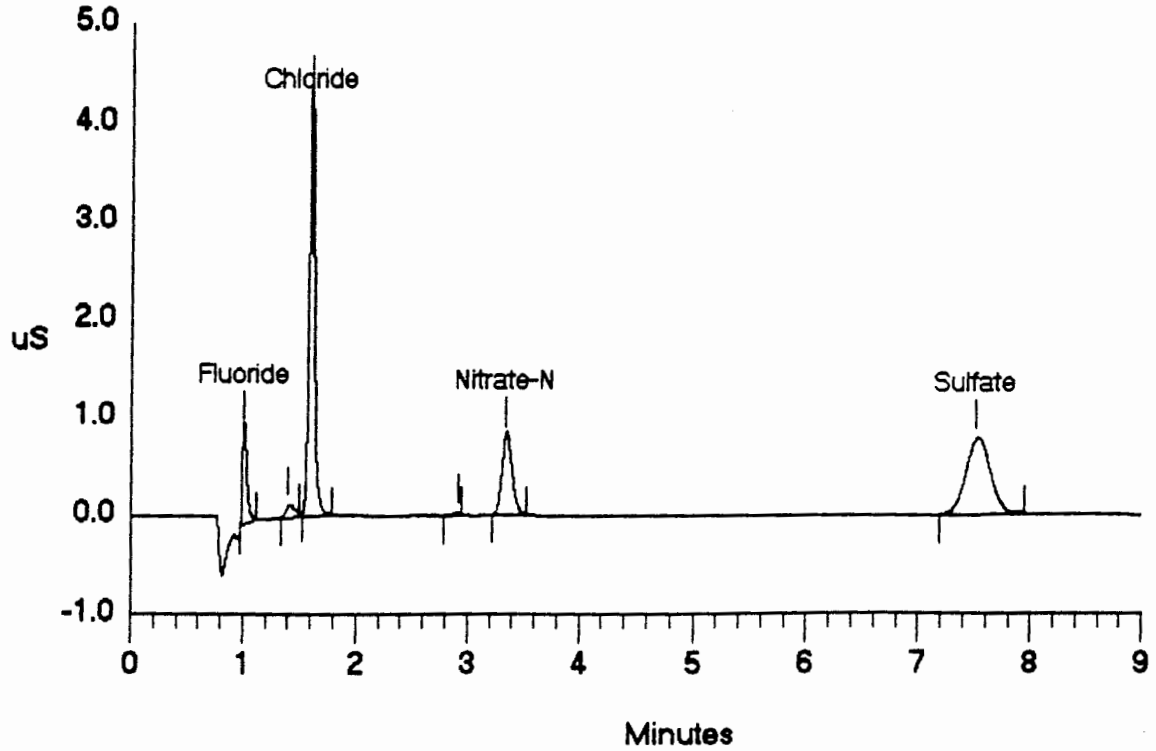
Sample Name: 5638-10 Date: 09/29/1998 21:07:59
Da* File : C:\DX\DATA\09299801.D20
Me d : C:\DX\METHOD\TEST11.MET
ACI Address: 1 System: 1 Inject#: 20 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

alibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
xternal	1	1	2700	5Hz	0.00	9.00		100

********** Peak Report: All Peaks **********

'k. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	0.323	952	2903	1	0.00
2	1.40		0.000	117	744	2	
3	1.58	Chloride	2.249	3864	15516	2	-1.04
5	3.33	Nitrate-N	0.417	780	5246	1	1.01
6	7.50	Sulfate	2.638	766	11950	1	3.21
		Totals	5.627	6479	36360		

File: 09299801.D20 Sample: 5638-10



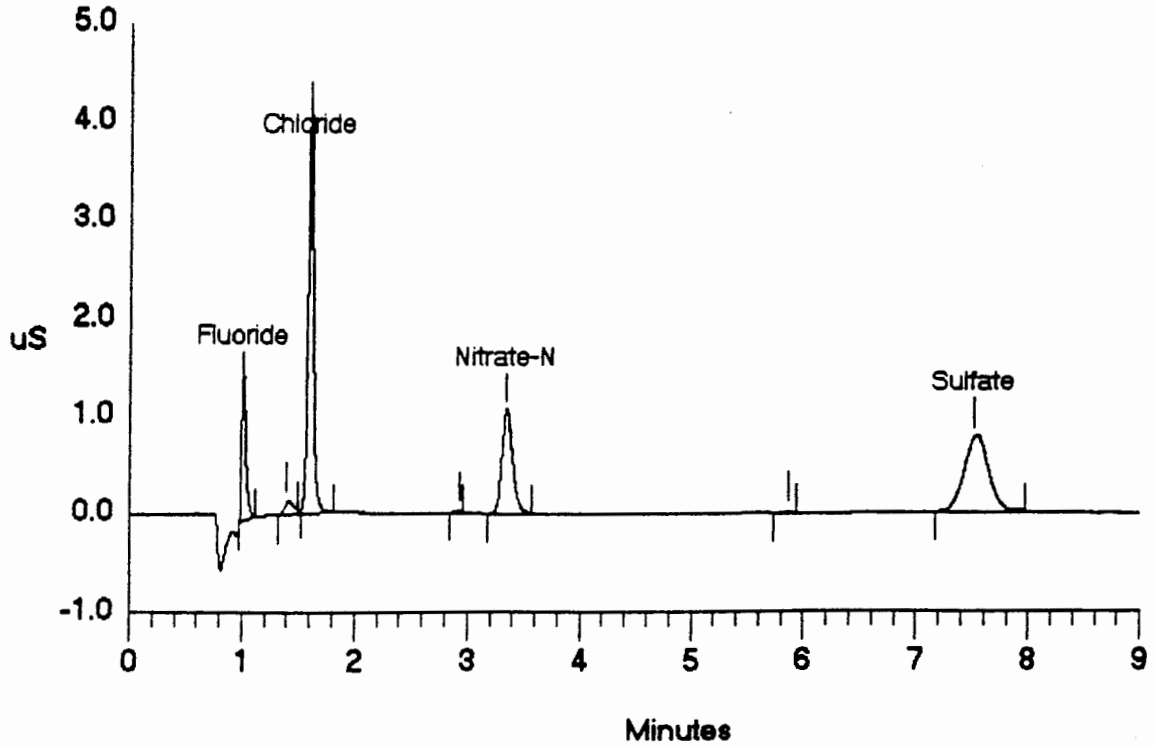
Sample Name: 5638-07 Date: 09/29/1998 21:19:27
Da' File : C:\DX\DATA\09299801.D21
Me : C:\DX\METHOD\TEST11.MET
ACI Address: 1 System: 1 Inject#: 21 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

ilibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
:ternal	1	1	2700	5Hz	0.00	9.00		100

********** Peak Report: All Peaks **********

'k. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	0.419	1332	4084	1	0.00
2	1.40		0.000	127	852	2	
3	1.58	Chloride	2.143	3395	14666	2	-1.04
5	3.33	Nitrate-N	0.511	1030	7022	1	1.01
7	7.50	Sulfate	2.620	750	11858	1	3.21
		Totals	5.692	6634	38482		

File: 09299801.D21 Sample: 5638-07



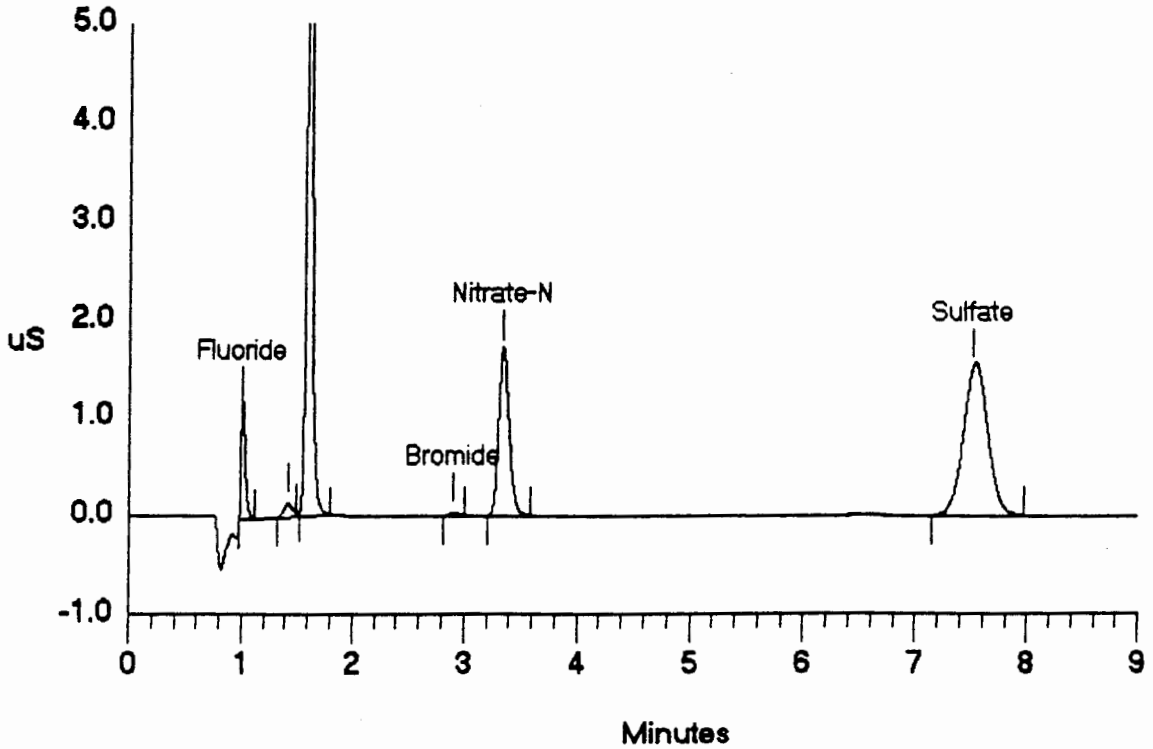
Sample Name: 5638-06 Date: 09/29/1998 21:30:55
Da+ File : C:\DX\DATA\09299801.D22
Me : C:\DX\METHOD\TEST11.MET
ACI Address: 1 System: 1 Inject#: 22 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

ılibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
:ternal	1	1	2700	5Hz	0.00	9.00	100

********** Peak Report: All Peaks **********

'k. Ium	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	0.351	1140	3253	1	0.00
2	1.42		0.000	146	826	2	
3	1.60	Chloride	4.074	9364	30169	2	0.00
4	2.90	Bromide	0.110	30	152	1	-1.14
5	3.33	Nitrate-N	0.720	1690	10980	1	1.01
6	7.50	Sulfate	5.020	1500	23560	1	3.21
		Totals	10.276	13870	68940		

File: 09299801.D22 Sample: 5638-06



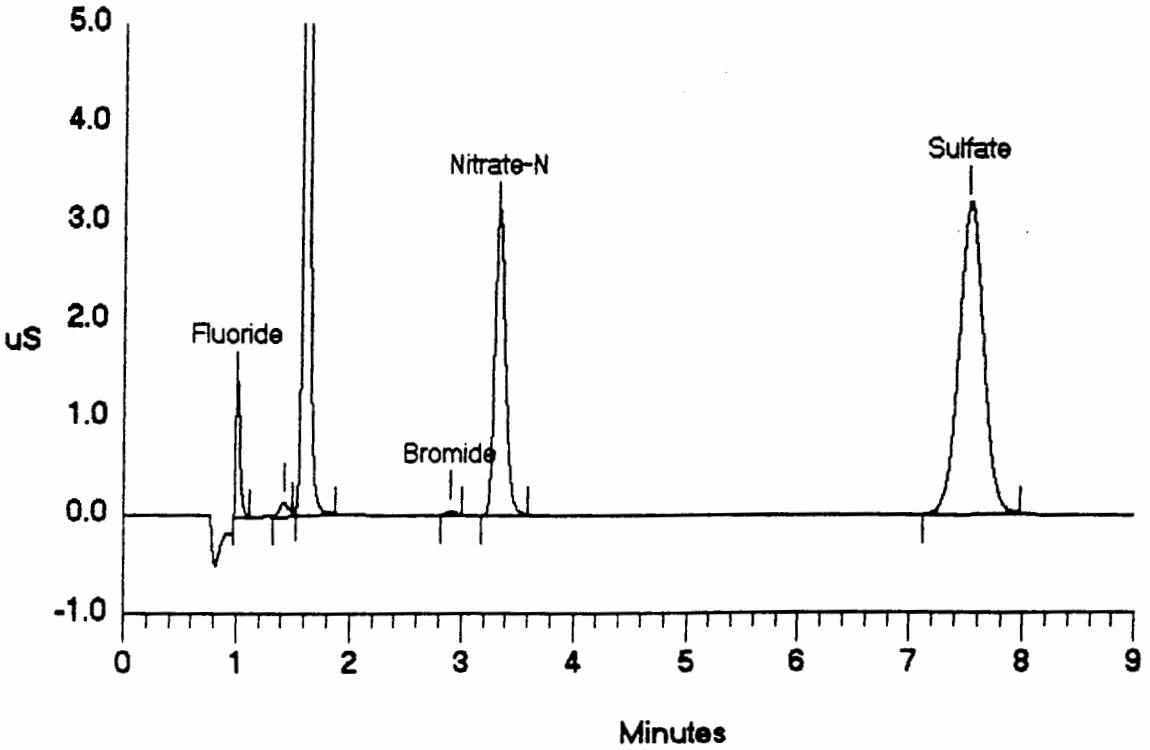
Sample Name: 5638-04 Date: 09/29/1998 21:42:24
Data File : C:\DX\DATA\09299801.D23
Me : C:\DX\METHOD\TEST11.MET
ACI Address: 1 System: 1 Inject#: 23 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

libration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
ternal	1	1	2700	5Hz	0.00	9.00	100

********** Peak Report: All Peaks **********

k. um	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	0.396	1292	3806	1	0.00
2	1.42		0.000	147	858	2	
3	1.60	Chloride	6.479	14915	49479	2	0.00
4	2.90	Bromide	0.139	50	236	1	-1.14
5	3.32	Nitrate-N	1.238	3000	20750	1	0.51
6	7.50	Sulfate	10.005	3155	47860	1	3.21
		Totals	18.258	22559	122988		

File: 09299801.D23 Sample: 5638-04



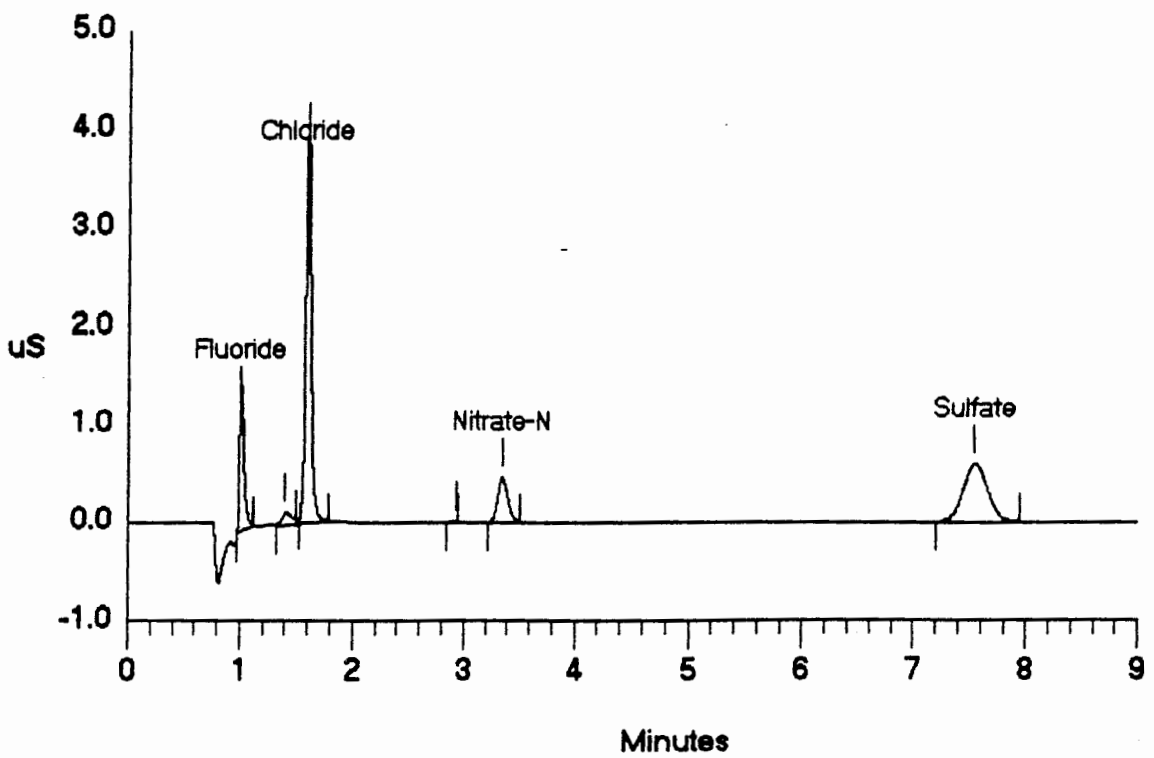
Sample Name: 5638-08	Date: 09/29/1998 21:53:52
Data File : C:\DX\DATA\09299801.D24	
M d : C:\DX\METHOD\TEST11.MET	
AC. Address: 1 System: 1 Inject#: 24	Detector:CDM-1
Analyst : RMV	Column: DIONEX AS4A-SC Serial #12423

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	1	2700	5Hz	0.00	9.00	100

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	0.426	1279	4169	1	0.00
2	1.40		0.000	125	748	2	
3	1.58	Chloride	2.088	3418	14226	2	-1.04
5	3.35	Nitrate-N	0.295	461	2945	1	1.52
6	7.53	Sulfate	2.025	590	8958	1	3.67
		Totals	4.833	5873	31046		

File: 09299801.D24 Sample: 5638-08



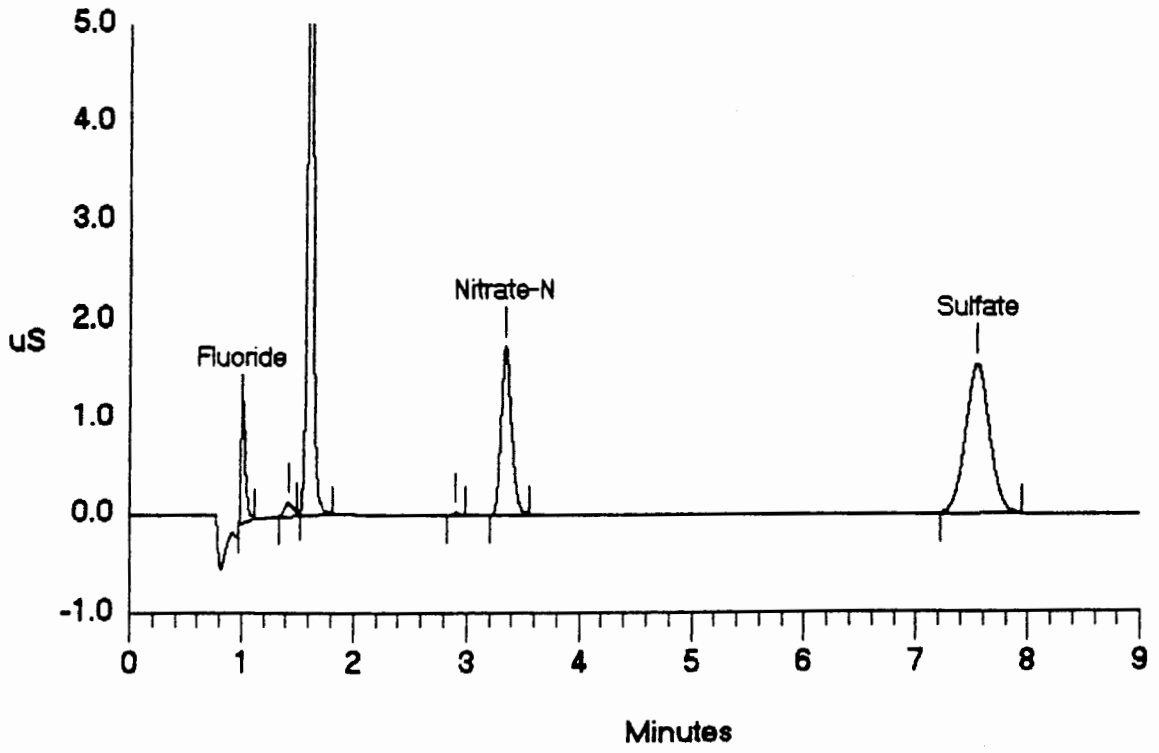
Sample Name: 5638-03 Date: 09/29/1998 22:05:20
Da' ile : C:\DX\DATA\09299801.D25
Me : C:\DX\METHOD\TEST11.MET
ACI Address: 1 System: 1 Inject#: 25 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

libration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
ternal	1	1	2700	5Hz	0.00	9.00		100

********** Peak Report: All Peaks **********

k. um	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	0.371	1130	3491	1	0.00
2	1.42		0.000	136	798	2	
3	1.60	Chloride	4.127	9394	30595	2	0.00
5	3.33	Nitrate-N	0.730	1721	11168	1	1.01
6	7.53	Sulfate	4.905	1546	22997	1	3.67
		Totals	10.133	13928	69048		

File: 09299801.D25 Sample: 5638-03



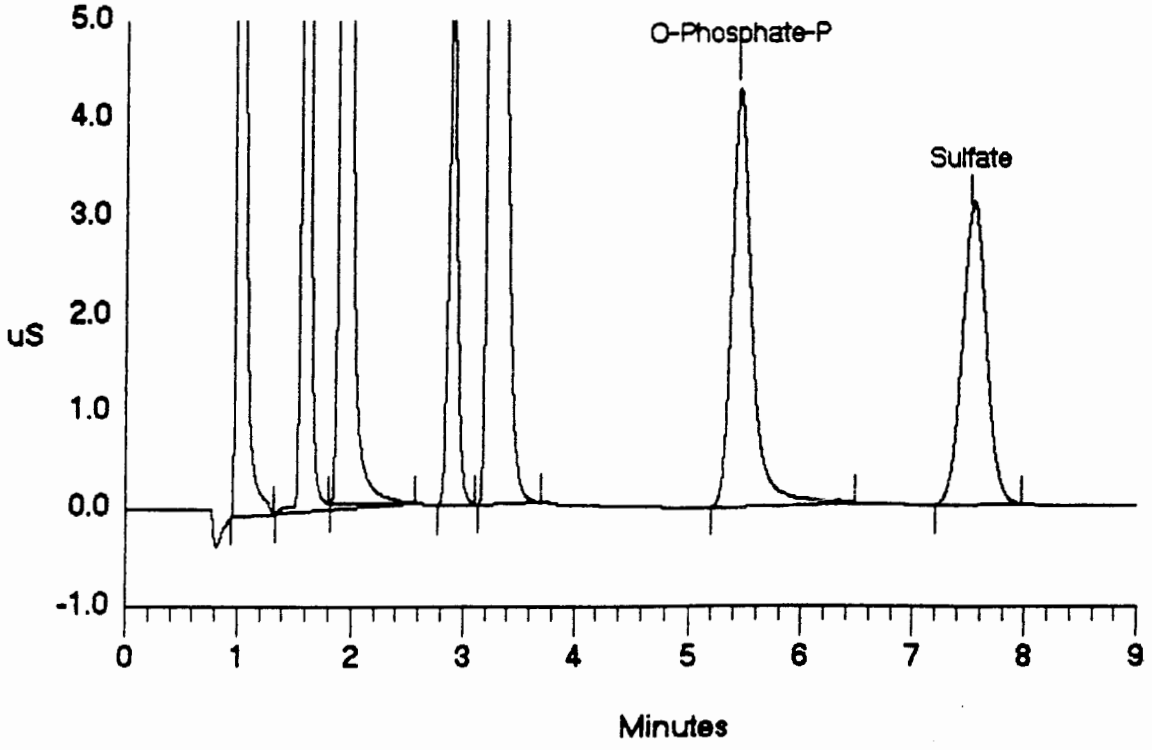
Sample Name: CCV Date: 09/29/1998 22:28:16
D: File : C:\DX\DATA\09299801.D27
M d : C:\DX\METHOD\TEST11.MET
ACI Address: 1 System: 1 Inject#: 27 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

alibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
cternal	1	1	2700	5Hz	0.00	9.00		100

********** Peak Report: All Peaks **********

'k. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	9.745	30278	118764	1	0.00
2	1.58	Chloride	9.716	17931	75464	3	-1.04
3	1.93	nitrite	9.856	34549	162870	4	-0.85
4	2.88	Bromide	9.676	5007	27813	1	-1.70
5	3.23	Nitrate-N	9.664	23354	179849	1	-2.02
6	5.43	O-Phosphate-P	4.383	4262	53680	1	1.88
7	7.50	Sulfate	9.746	2986	46595	1	3.21
		Totals	62.784	118367	665035		

File: 09299801.D27 Sample: CCV



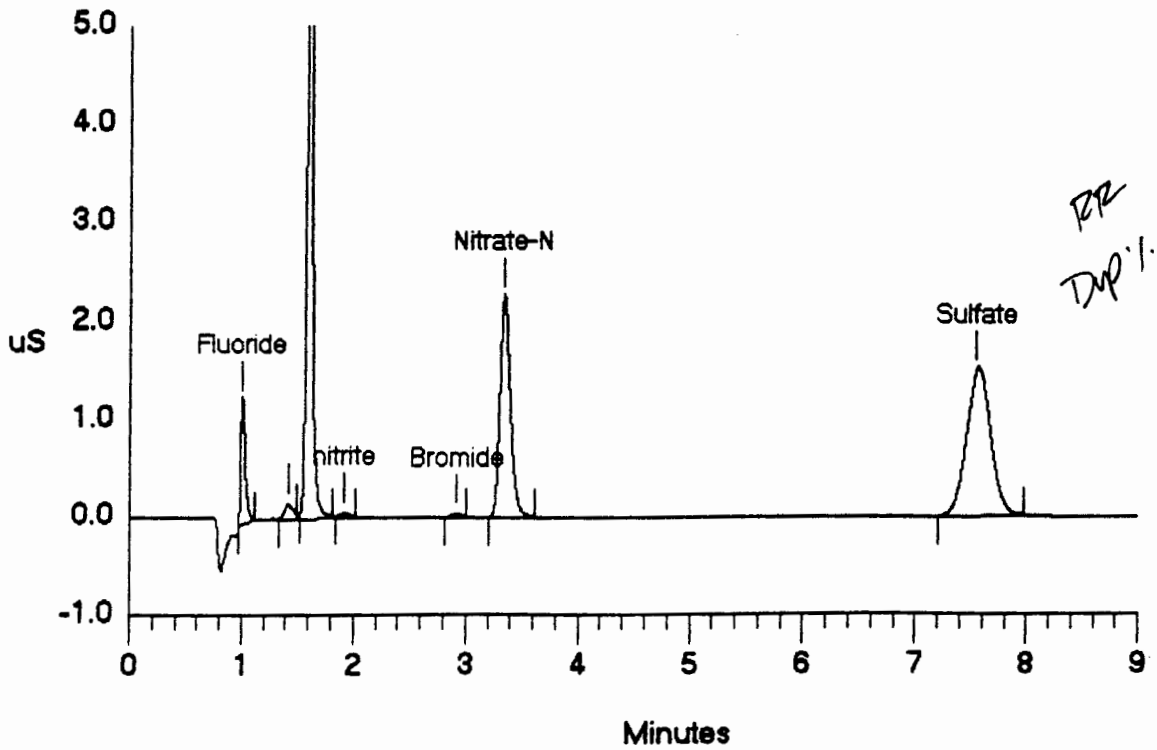
Sample Name: 5638-02 Date: 09/29/1998 22:39:45
D· ·· File : C:\DX\DATA\09299801.D28
ı od : C:\DX\METHOD\TEST11.MET
ACI Address: 1 System: 1 Inject#: 28 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

ılibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
(ternal	1	1	2700	5Hz	0.00	9.00		100

********** Peak Report: All Peaks **********

ʼk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	0.386	1251	3686	1	0.00
2	1.42		0.000	159	883	2	
3	1.60	Chloride	3.448	7523	25141	3	0.00
4	1.92	nitrite	0.143	40	216	4	-1.71
5	2.92	Bromide	0.116	30	170	1	-0.57
6	3.33	Nitrate-N	0.911	2230	14586	1	1.01
7	7.53	Sulfate	4.868	1476	22818	1	3.67
		Totals	9.873	12709	67499		

File: 09299801.D28 Sample: 5638-02



RR
DUP'L RTD
For SOK

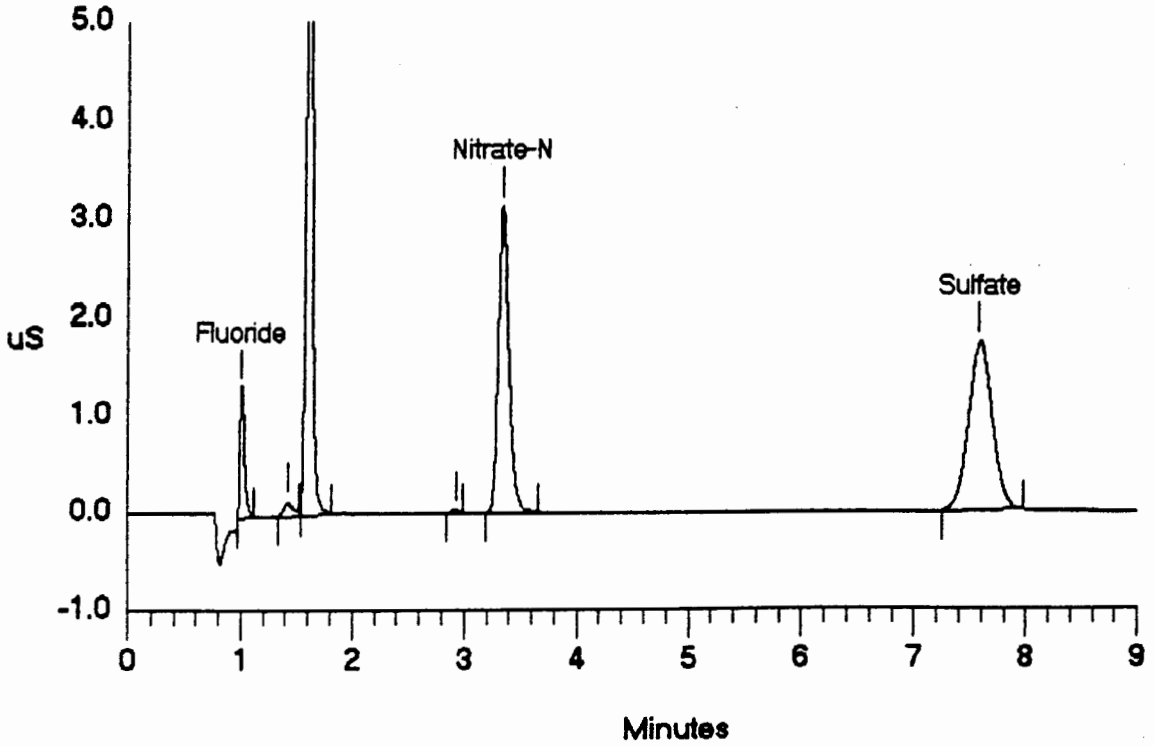
Sample Name: 5638-01 Date: 09/29/1998 23:14:11
Da File : C:\DX\DATA\09299801.D31
Me. d : C:\DX\METHOD\TEST11.MET
ACI Address: 1 System: 1 Inject#: 31 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

alibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
xternal	1	1	2700	5Hz	0.00	9.00		100

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	0.416	1327	4046	1	0.00
2	1.42		0.000	137	785	2	
3	1.60	Chloride	4.387	9534	32678	2	0.00
5	3.33	Nitrate-N	1.222	3121	20455	1	1.01
6	7.57	Sulfate	5.498	1731	25888	1	4.13
		Totals	11.522	15850	83853		

File: 09299801.D31 Sample: 5638-01



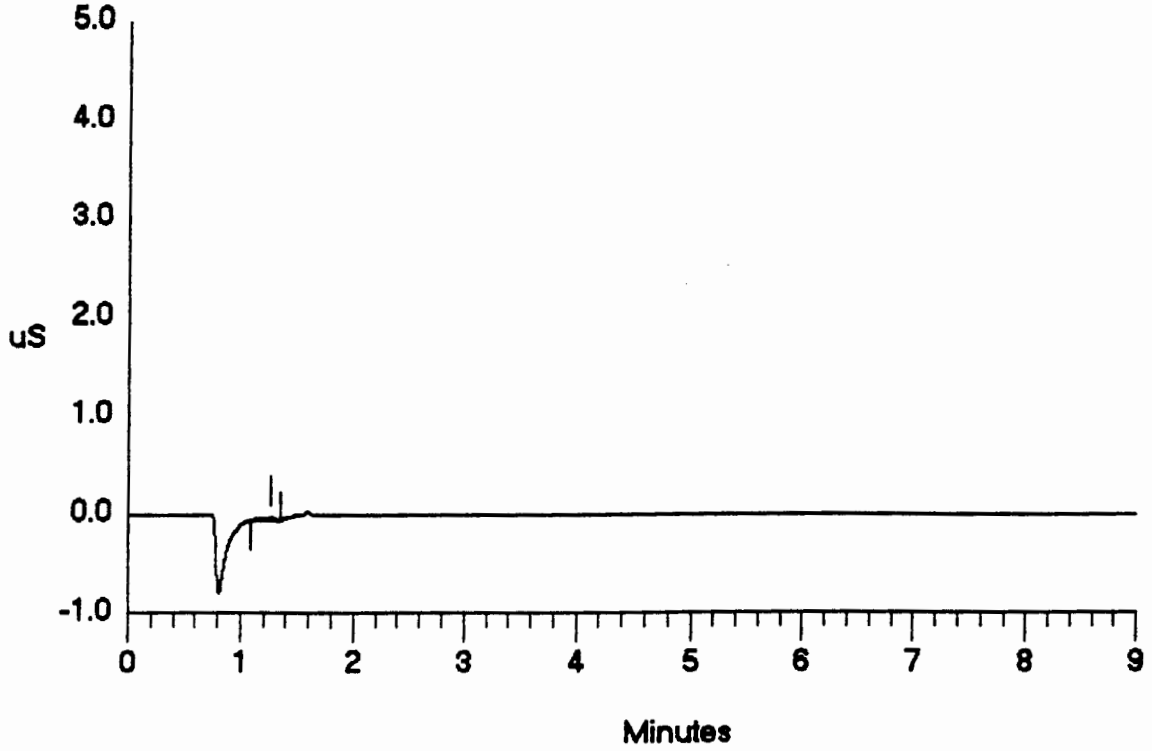
Sample Name: CB Date: 09/29/1998 23:25:39
Da File : C:\DX\DATA\09299801.D32
Me. : C:\DX\METHOD\TEST11.MET
ACI Address: 1 System: 1 Inject#: 32 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

ilibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
cternal	1	1	2700	5Hz	0.00	9.00	100

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.27		0.000	40	334	1	
		Totals	0.000	40	334		

File: 09299801.D32 Sample: CB



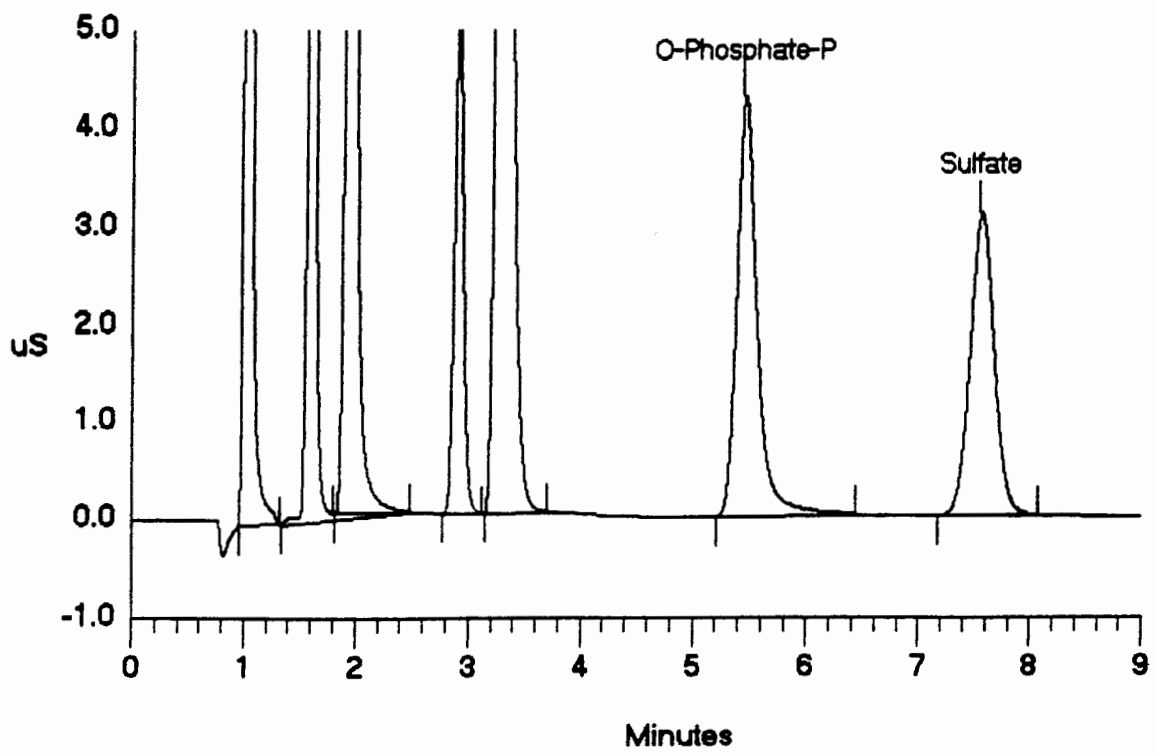
Sample Name: CCV Date: 09/29/1998 23:37:07
D: File : C:\DX\DATA\09299801.D33
M d : C:\DX\METHOD\TEST11.MET
ACI Address: 1 System: 1 Inject#: 33 Detector:CDM-1
Analyst : RMV Column: DIONEX AS4A-SC Serial #12423

alibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
xternal	1	1	2700	5Hz	0.00	9.00		100

********** Peak Report: All Peaks **********

Pk. Num	Ret Time	Component Name	Concentration mg/l	Height	Area	Bl. Code	%Delta
1	1.00	Fluoride	9.793	33368	119361	1	0.00
2	1.58	Chloride	9.588	16033	74435	3	-1.04
3	1.93	nitrite	9.491	33129	156758	4	-0.85
4	2.90	Bromide	9.979	5230	28690	1	-1.14
5	3.25	Nitrate-N	9.558	24145	177847	1	-1.52
6	5.43	O-Phosphate-P	4.359	4184	53373	1	1.88
7	7.53	Sulfate	9.753	3020	46630	1	3.67
		Totals	62.520	119110	657093		

File: 09299801.D33 Sample: CCV



QUALITY CONTROL SUMMARY

CT & E Environmental S[illegible]ces, Inc. - Anatech Division

METALS BATCH QC SUMMARY

PREP BATCH: M8954
DATE: 9/30/98
UNITS: mg/L
RUN: 0372

ELEMENT	PB	PS Result	PS (%)	Sample Result	MS Result	MS (%)	MSD Result	MSD (%)	RPD (%)	AS (%)
Silver	ND	0.0451	90	ND	0.0441	88	0.0449	90	2.25	
Aluminum	0.2955	4.623	92	0.1542	4.546	88	4.60	89	1.13	
Arsenic	ND	4.483	90	ND	4.418	88	4.458	89	1.13	
Barium	0.0051	4.673	93	0.0308	4.636	92	4.66	93	1.08	
Beryllium	ND	4.707	94	0.0037	4.685	94	4.743	95	1.06	
Calcium	ND	4.791	96	11.09	15.79	94	15.89	96	2.11	
Cadmium	ND	4.609	92	0.003	4.576	91	4.622	92	1.09	
Cobalt	ND	4.799	96	0.0028	4.761	95	4.804	96	1.05	
Chromium	ND	4.538	91	ND	4.50	90	4.599	92	2.20	
Copper	ND	4.783	96	ND	4.741	95	4.772	95	0.0	
Iron	ND	4.612	92	ND	4.580	92	4.683	94	2.15	
Magnesium	ND	4.793	96	2.623	7.388	95	7.515	98	3.11	
Manganese	ND	4.676	93	0.0036	4.629	92	4.722	94	2.15	
Molybdenum	ND	4.699	94	ND	4.660	93	4.727	94	1.07	
Sodium	1.477	5.77	115	10.06	15.59	111	15.85	116	3.54	
Nickel	ND	4.727	94	ND	4.677	93	4.740	95	2.13	
Antimony	ND	4.757	95	0.0216	4.669	93	4.946	98	5.24	
Thallium	ND	4.627	92	ND	4.697	94	4.782	96	2.11	
Vanadium	ND	4.799	96	ND	4.775	95	4.834	97	2.08	
Zinc	ND	4.641	93	ND	4.619	92	4.661	93	1.08	
Lead	0.0056	4.650	93	0.0084	4.63	92	4.689	92	0.0	
Selenium	ND	4.394	88	ND	4.411	88	4.427	88	0.0	

Spiked Sample: 84492-8743

PS Acceptance Range - 85-115%

MS/MSD Range - 80-120%

CT & E Environmental S es, Inc. - Anatech Division

METALS BATCH QC SUMMARY

PREP BATCH: M8955
DATE: 9/30/98
UNITS: mg/L
RUN: 0372

ELEMENT	PB	PS Result	PS (%)	Sample Result	MS Result	MS (%)	MSD Result	MSD (%)	RPD (%)	AS (%)
Silver	ND	0.0439	88	ND	0.0432	86	0.0425	85	1.17	
Aluminum										
Arsenic										
Barium										
Beryllium										
Calcium										
Cadmium										
Cobalt										
Chromium										
Copper										
Iron										
Magnesium										
Manganese										
Molybdenum										
Sodium										
Nickel										
Antimony										
Thallium										
Vanadium										
Zinc										
Lead										
Selenium										

Spiked Sample: 84492-8743

PS Acceptance Range - 85-115%

MS/MSD Range - 80-120%

CT & E Environmental Services, Inc. - Anatech Division

METALS CALIBRATION QC SUMMARY

RUN #: 0372
DATE: 9/30/98
UNITS: mg/L

ELEMENT	ICB	CCB	CCB	CCB	CCB	CCB	ICV	CCV	CCV	CCV	CCV	CCV
Silver	0.0021	ND	ND				100	101	99			
Aluminum	ND	ND	ND				91	89	94			
Arsenic	ND	ND	ND				98	101	99			
Barium	ND	ND	ND				100	99	99			
Beryllium	0.0026	0.0011	0.001				101	101	104			
Calcium	ND	ND	ND				97	98	100			
Cadmium	0.0023	ND	ND				99	100	99			
Cobalt	0.0025	ND	ND				100	102	99			
Chromium	ND	ND	ND				97	97	98			
Copper	ND	ND	ND				98	99	98			
Iron	ND	ND	ND				100	99	100			
Magnesium	ND	ND	ND				101	99	100			
Manganese	ND	ND	ND				100	101	100			
Molybdenum	ND	ND	ND				98	98	98			
Sodium	ND	ND	ND				96	97	96			
Nickel	ND	ND	ND				99	101	99			
Antimony	0.0106	ND	ND				103	106	102			
Thallium	ND	ND	ND				95	94	96			
Vanadium	ND	ND	ND				102	99	100			
Zinc	ND	ND	ND				103	100	102			
Lead	0.0079	ND	ND				98	100	97			
Selenium	ND	ND	ND				98	98	98			

CT & E Environmental Services, Inc. - Anatech Division

METALS CALIBRATION QC SUMMARY

RUN #: 0372
DATE: 9/30/98
UNITS: mg/L

ELEMENT	ICB	CCB	CCB	CCB	CCB	CCB	ICV	CCV	CCV	CCV	CCV	CCV
Silver	ND	0.0008	ND				99	99	102			
Aluminum												
Arsenic												
Barium												
Beryllium												
Calcium												
Cadmium												
Cobalt												
Chromium												
Copper												
Iron												
Magnesium												
Manganese												
Molybdenum												
Sodium												
Nickel												
Antimony												
Thallium												
Vanadium												
Zinc												
Lead												
Selenium												

CT & E Environmental Services, Inc. - Anatech Division

INORGANIC QC SUMMARY

ANALYTE:	Hg	RUN DATE:	10/1/98
INSTRUMENT:	Varian AA	REPORT DATE:	10/1/98
PREP BATCH:	558	RUN #:	743
DIGESTION DATE:	10/1/98	METHOD:	7470
ANALYST:	SMM	REVIEW:	
UNITS:	ug/L	PROJECT #:	84464

BLANKS	CONC.	LOD	COMMENT
PREP BLANK	ND	0.2	
ICB	ND	0.2	
CCB1	ND	0.2	
CCB2	ND	0.2	
CCB3	ND	0.2	
CCB4			
CCB5			

ICV/CCV	TRUE	FOUND	% RECOVERY	COMMENT
ICV	1.0	1.0760	108	
CCV1	1.0	1.029	103	
CCV2	1.0	1.014	101	
CCV3				
CCV4				
CCV5				

SPIKES	SPK ADDED	SAMPLE CONC	SPK CONC	% RECOVERY	C
PREP SPK	1.0		0.965	96	
MS - 84464-8677	1.0	ND	0.936	94	
MSD - 84464-8677	1.0	ND	1.000	100	
			RPD=	6.2	

ASPK	SPK ADDED	SAMPLE CONC	ASPK CONC	% RECOVERY	C

MSA	SAMPLE ID:				
ADDITION 1:	ADDITION 2:	ADDITION 3:	ADDITION 4:	CORRELATION COEFFICIENT	VALUE

CT & E Environmental Services, Inc. - Anatech Division

INORGANIC QC SUMMARY

ANALYTE:	Hg	RUN DATE:	10/2/98
INSTRUMENT:	Varian AA 20	REPORT DATE:	10/2/98
PREP BATCH:	559	ANALYTICAL BATCH:	744
DIGESTION DATE:	10/2/98	METHOD:	7470
ANALYST:	SMM	REVIEW:	
UNITS:	ug/L	PROJECT #:	84492

BLANKS	CONC.	LOD	COMMENT
PREP BLANK	ND	0.2	
ICB	ND	0.2	
CCB1	ND	0.2	
CCB2	ND	0.2	
CCB3			
CCB4			
CCB5			

ICV/CCV	TRUE	FOUND	% RECOVERY	COMMENT
ICV	1.0	1.07	107.0	
CCV1	1.0	1.08	108.0	
CCV2	1.0	1.08	108.0	
CCV3				
CCV4				
CCV5				

SPIKES	SPK ADDED	SAMPLE CONC	SPK CONC	% RECOVERY	C
LCS	1.0		1.032	103.20	
MS	1.0	ND	0.975	97.50	
MSD	1.0	ND	1.017	101.70	
			RPD=	4.22	

Spike Sample: SP-Ancho-98

ASPK	SPK ADDED	SAMPLE CONC	ASPK CONC	% RECOVERY	C

MSA	SAMPLE ID:				
ADDITION 1:	ADDITION 2:	ADDITION 3:	ADDITION 4:	CORRELATION COEFFICIENT	VALUE
0					

CT & E Environmental Services, Inc. - Anatech Division

INORGANIC QC SUMMARY

ANALYTE:	K	RUN DATE:	9/30/98
INSTRUMENT:	Varian AA	REPORT DATE:	11/12/98
PREP BATCH:	8954	ANALYTICAL BATCH:	741
DIGESTION DATE:	9/29/98	METHOD:	7610
ANALYST:	SMM	REVIEW:	
UNITS:	mg/L	PROJECT #:	84464

BLANKS	CONC.	LOD	COMMENT
PREP BLANK	ND	0.5	
ICB	ND	0.5	
CCB1	ND	0.5	
CCB2	ND	0.5	
CCB3	ND	0.5	
CCB4			
CCB5			

ICV/CCV	TRUE	FOUND	% RECOVERY	COMMENT
ICV	1.0	0.96	96.0	
CCV1	1.0	0.95	94.1	
CCV2	1.0	0.97	97.0	
CCV3	1.0	1	100.0	
CCV4				
CCV5				

SPIKES	SPK ADDED	SAMPLE CONC	SPK CONC	% RECOVERY	C
LCS	5.00		4.990	99.80	
MS	5.00	1.57	5.290	74.40	
MSD	5.00	1.57	5.200	72.60	
Spiked Sample ID: SP-Ancho-98			RPD=	2.45	

ASPK	SPK ADDED	SAMPLE CONC	ASPK CONC	% RECOVERY	C

MSA	SAMPLE ID:				
ADDITION 1:	ADDITION 2:	ADDITION 3:	ADDITION 4:	CORRELATION COEFFICIENT	VALUE

RAW DATA

Rt#0372

84492 M8954
84464 Ag M8955

Tier IV QC

tt NOAIKW Standard: BLANK
[illegible] 09/30/98 11:04:37

000855

tem	Ag	Al	As	Ba	Be	Ca	
ge	-.0001	.0018	-.0002	.0000	-.0077	.0000	-.0018
ew	.0001	.0001	.0001	.0001	.0001	.0001	.0001
SD	185.7	2.882	80.30	230.5	1.727	833.7	2.709

	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	-.0002	.0048	-.0003	-.0000	-.0077	-.0001	-.0019
3	.0000	.0045	-.0002	.0001	-.0076	.0000	-.0020

Lem	Cd	Co	Cr	Cu	Fe	K	Li
vge	.0001	-.0006	-.0000	.0018	.0001	.0083	.0002
Dev	.0002	.0001	.0000	.0006	.0001	.0024	.0001
SD	153.2	13.64	341.4	34.87	65.85	28.62	29.31
1	.0003	-.0005	-.0000	.0015	.0000	.0077	.0002
2	-.0000	-.0006	-.0000	.0014	.0002	.0063	.0003
3	.0001	-.0007	.0000	.0025	.0001	.0109	.0002

Lem	Mg	Mn	Mo	Na	Ni	220371	220372
vge	-.0001	.0001	.0000	.0067	-.0003	.0003	.0002
Dev	.0000	.0000	.0001	.0006	.0001	.0013	.0002
SD	12.87	22.12	112000.	8.402	22.77	375.0	132.8
1	-.0000	.0001	-.0001	.0070	-.0003	.0005	.0001
2	-.0000	.0001	.0001	.0060	-.0002	-.0010	.0002
3	-.0001	.0001	.0000	.0070	-.0003	.0016	-.0001

Lem	Sb	198071	198072	Sn	Ti	V	Zn
ge	.0000	-.0011	.0003	.0033	-.0009	.0000	.0000
Dev	.0001	.0001	.0003	.0002	.0001	.0000	.0001
SD	173.2	13.05	102.1	4.904	7.719	86.60	184.9
1	.0000	-.0012	.0007	.0033	-.0010	.0000	.0000
2	.0001	-.0009	.0002	.0035	-.0009	.0000	-.0000
3	.0000	-.0011	.0001	.0032	-.0008	.0000	.0001

Lem	Pb
ge	.0003
Dev	.0000
SD	.5768
	.0003
	.0003
	.0003

tStd	1	2	3	4	5	6	7
de	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
m	Y	--	--	--	--	--	--
vlem	280.083	--	--	--	--	--	--
ge	24731	--	--	--	--	--	--
ev	142.0012	--	--	--	--	--	--
SD	.5782188	--	--	--	--	--	--
	24884	--	--	--	--	--	--

24618	--	--	--	--	--	--
24892	--	--	--	--	--	--

000856

od: NOAIKW Standard: STD1
Time: 09/30/98 11:09:56

m	Ag	Al	As	Ba	Be	C

SDev	.0059	.0003	.0005	.0167	.0031	.0001	.0003
%RSD	1.440	1.949	1.387	2.199	1.187	1.285	1.378
=1	.4047	.0123	.0116	.7397	.2643	.0113	.0194
=2	.4147	.0127	.0117	.7674	.2705	.0115	.0188
=3	.4152	.0127	.0125	.7697	.2680	.0113	.0193

	Cd	Co	Cr	Cu	Fe	K	Li
Avge	.2124	.0651	.1101	.2116	.0053	.0803	7.115
SDev	.0053	.0022	.0032	.0032	.0002	.0018	.251
%RSD	2.189	3.325	2.893	1.512	3.031	2.275	3.521
=1	.2363	.0628	.1066	.2079	.0051	.0782	6.831
=2	.2148	.0654	.1127	.2135	.0053	.0813	7.209
=3	.2161	.0670	.1112	.2133	.0054	.0814	7.306

Item	Mg	Mn	Mo	Na	Ni	220371	220372
Avge	.0121	.1328	.0232	.2887	.0937	.1749	.0258
SDev	.0004	.0051	.0008	.0087	.0016	.0036	.0004
%RSD	2.953	3.818	3.618	2.927	1.661	2.071	1.599
1	.0117	.1270	.0222	.2889	.0920	.1708	.0258
2	.0123	.1358	.0237	.3013	.0951	.1775	.0258
3	.0122	.1357	.0237	.3058	.0939	.1764	.0263

Item	Sb	196071	196072	Sn	Ti	V	Zn
Avge	.0119	.0106	.0108	.0033	.0068	.0315	.0107
SDev	.0006	.0002	.0006	.0002	.0003	.0008	.0004
%RSD	5.214	1.577	5.359	6.478	5.043	2.383	3.426
1	.0112	.0105	.0105	.0031	.0067	.0306	.0103
2	.0121	.0108	.0115	.0034	.0066	.0320	.0108
3	.0124	.0105	.0105	.0035	.0072	.0319	.0110

Item	Pb
Avge	.0004
SDev	.0000
%RSD	1.988
1	.0004
2	.0004
3	.0004

ntStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Item	Y	--	--	--	--	--	--
Avlen	380.083	--	--	--	--	--	--
Avge	25051	--	--	--	--	--	--

Ne	502.8951	--	--	--	--	--	--
%RSD	2.008880	--	--	--	--	--	--
	25821	--	--	--	--	--	--
	24883	--	--	--	--	--	--
	24870	--	--	--	--	--	--

m Time: 09/30/98 11:15:16

Elem	Ag	Al	As	Ba	Be	Ca	Ca
Avge	1.692	.1610	.0492	3.087	1.126	.2106	.3978
SDev	.015	.0016	.0004	.017	.007	.0019	.0027
%RSD	.8922	.9969	.8037	.5459	.6109	.9112	.6723
1	1.671	.1595	.0488	3.089	1.118	.2085	.3949
2	1.700	.1627	.0494	3.089	1.131	.2109	.4001
3	1.701	.1609	.0495	3.102	1.128	.2123	.3985

Elem	Cd	Co	Cr	Cu	Fe	K	Li
Avge	.0923	.2683	.4500	.8743	.0947	.3853	39.18
SDev	.0011	.0018	.0100	.0078	.0010	.0024	.22
%RSD	.1472	.6558	2.234	.8895	1.085	.6267	1.072
1	.9935	.2679	.4385	.8654	.0936	.3841	39.15
2	.9871	.2687	.4564	.8776	.0947	.3835	39.28
3	.9960	.2702	.4553	.8799	.0957	.3880	39.94

Elem	Mg	Mn	Mo	Na	Ni	2203/1	2203/2
Avge	.2355	.5375	.0933	6.420	.3837	.7339	.1093
SDev	.0052	.0077	.0012	.072	.0036	.0127	.0017
%RSD	2.208	1.442	1.332	1.127	.9316	1.735	1.536
1	.2295	.5291	.0921	6.414	.3808	.7280	.1073
2	.2390	.5392	.0933	6.350	.3825	.7252	.1071
3	.2379	.5443	.0946	6.495	.3877	.7485	.1103

Elem	Sb	1980/1	1980/2	Sn	Tl	V	Zn
Avge	.0482	.0479	.0457	.0036	.0298	.6088	.2038
SDev	.0006	.0008	.0015	.0000	.0001	.0088	.0010
%RSD	1.249	1.571	3.242	.9748	.3743	1.444	.4949
	.0476	.0472	.0444	.0035	.0298	.5985	.2029
	.0482	.0477	.0453	.0036	.0297	.6128	.2037
	.0488	.0487	.0473	.0036	.0299	.6108	.2049

Elem	Pb
Avge	.0004
SDev	.0000
%RSD	.8248
	.0004
	.0004
	.0004

Std	1	2	3	4	5	6	7

Standardization Rpt Wed 09-30-98 11:20:08 AM Page 1

	Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Y		--	--	--	--	--	
Elem	360.063	--	--	--	--	--	
	24817	--	--	--	--	--	--
	202.2581	--	--	--	--	--	--
	.8218081	--	--	--	--	--	--

000858

#2	24771	--	--	--	--	--	--
#3	24389	--	--	--	--	--	--

Method: NOALKW Standard: STD3
Run Time: 09/30/98 11:20:36

F	Ag	Al	As	Ba	Be	Ca	Ca
Avge	7.886	.7905	.2351	14.14	5.004	1.031	1.906
SDev	.070	.0123	.0019	.07	.052	.003	.010
%RSD	.8884	1.559	.7914	.5132	1.047	.2687	.5120
#1	7.836	.7863	.2338	14.15	4.962	1.024	1.903
#2	7.857	.7808	.2343	14.07	4.987	1.028	1.899
#3	7.966	.8044	.2372	14.21	5.063	1.032	1.917

Elem	Cd	Co	Cr	Cu	Fe	K	Li
Avge	1.540	1.237	2.056	4.140	.4454	2.338	282.1
SDev	.030	.009	.054	.043	.0074	.032	5.2
%RSD	.8554	.7537	2.617	1.038	1.666	1.370	1.870
#1	1.554	1.235	2.016	4.113	.4412	2.316	279.1
#2	1.506	1.229	2.034	4.117	.4411	2.324	279.0
#3	1.560	1.247	2.117	4.189	.4540	2.375	288.2

Elem	Mg	Mn	Mo	Na	Ni	2203/1	2203/2
Avge	1.141	2.377	.4494	31.40	1.762	3.424	.5172
SDev	.031	.048	.0030	.51	.007	.004	.0029
%RSD	2.723	2.036	.6678	1.625	.4041	.1071	.5572
#1	1.117	2.346	.4488	31.05	1.766	3.425	.5162
#2	1.130	2.353	.4467	31.16	1.754	3.427	.5151
#3	1.176	2.433	.4526	31.99	1.767	3.420	.5205

Elem	Sb	1960/1	1960/2	Sn	Tl	V	Zn
Avge	.2426	.2301	.2141	.0043	.1473	2.912	.9170
SDev	.0021	.0020	.0010	.0002	.0009	.066	.0098
%RSD	.8610	.8585	.4553	4.624	.6390	2.283	1.051
#1	.2411	.2283	.2130	.0045	.1467	2.884	.9122
#2	.2418	.2299	.2148	.0041	.1489	2.884	.9099
#3	.2450	.2322	.2145	.0044	.1484	2.988	.9282

Elem	Pb
Avge	.0004
SDev	.0000
%RSD	.5914
	.0004
	.0004

.0004

tStd	1	2	3	4	5	6	000859
Date	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Sm	Y	--	--	--	--	--	--
Elem	360.083	--	--	--	--	--	--

%RSD	5895445	--	--	--	--	--	--
#1	23989	--	--	--	--	--	--
#2	24032	--	--	--	--	--	--
#3	23769	--	--	--	--	--	--

Me 1: NOAIKW Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag	328.068	Multiple	Standards	1.22069	.000028	09/30/98 11:20:36
Al	308.215	Multiple	Standards	65.4818	-.301904	09/30/98 11:20:36
As	189.042	Multiple	Standards	41.4419	.008340	09/30/98 11:20:36
Ba	193.409	Multiple	Standards	.870466	-.000135	09/30/98 11:20:36
Be	313.042	Multiple	Standards	1.85485	.014177	09/30/98 11:20:36
Ca	317.933	Multiple	Standards	24.8080	.047507	09/30/98 11:20:36
Cd	226.502	Multiple	Standards	55.5105	-.002056	09/30/98 11:20:36
Co	228.616	Multiple	Standards	2.09139	-.000354	09/30/98 11:20:36
Cr	267.716	Multiple	Standards	7.70261	.001478	09/30/98 11:20:36
Cu	324.754	Multiple	Standards	1.80531	-.000044	09/30/98 11:20:36
Fe	271.441	Multiple	Standards	2.36226	-.004187	09/30/98 11:20:36
K	766.491	Multiple	Standards	108.707	-.010477	09/30/98 11:20:36
Mg	279.079	Multiple	Standards	5.31913	-.042974	09/30/98 11:20:36
Mn	257.610	Multiple	Standards	.048192	.001515	09/30/98 11:20:36
Na	588.995	Multiple	Standards	41.8934	.002034	09/30/98 11:20:36
Ni	231.604	Multiple	Standards	3.88239	-.000609	09/30/98 11:20:36
Pb	220.351	Multiple	Standards	21.7387	-.000080	09/30/98 11:20:36
Pb/1	220.353	Multiple	Standards	1.62121	-.010522	09/30/98 11:20:36
Pb/2	206.838	Multiple	Standards	5.39547	.001355	09/30/98 11:20:36
Sb	196.021	Multiple	Standards	2.84153	-.000981	09/30/98 11:20:36
Se	196.022	Multiple	Standards	19.0545	-.003293	09/30/98 11:20:36
Sn	189.989	Multiple	Standards	41.4038	-.001066	09/30/98 11:20:36
Sr	190.864	Multiple	Standards	42.3300	.045662	09/30/98 11:20:36
Tl	292.402	Multiple	Standards	45.9869	-.015413	09/30/98 11:20:36
V	206.200	Multiple	Standards	11880.8	-39.3963	09/30/98 11:20:36
Zn	220.353	Multiple	Standards	81.1360	.058992	09/30/98 11:20:36
	196.026	NONE	NONE	16.4028	-.000881	09/30/98 11:20:36
				49.8078	-.000096	09/30/98 11:20:36
				.002173	-.000001	09/30/98 11:20:36
				1.00000	.000000	*NOT STANDARDIZED

Method: NOAIKW

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
	328.068	BLANK	.000000	-.000055	.000055
		STD1	.500000	.502389	-.002389
		STD2	2.00000	2.08500	-.085004
		STD3	10.0000	9.62693	.372071

Coef: 0.99989

Standardization Readback Report Wed 09-30-98 11:25:47 AM page 6

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
	308.215	BLANK	.000000	-.000012	[illegible]
		STD1	.500000	.521889	-.021889
		STD2	10.0000	10.2421	-.242193
		STD3	50.0000	51.4610	[illegible]

ement	Wavelength	Standard	Concentration	Concentration	Concentration
s	189.042	BLANK	.000000	-.000043	.000043
		STD1	.500000	.502638	-.002638
		STD2	2.00000	2.01815	-.018148
		STD3	10.0000	9.75171	.248285

rr Coef: 0.99995

ement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
s	493.409	BLANK	.000000	-.000117	.000117
		STD1	.500000	.508702	-.008702
		STD2	2.00000	2.06947	-.069475
		STD3	10.0000	9.48162	.518382

rr Coef: 0.99984

ement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
s	313.042	BLANK	.000000	-.000149	.000149
		STD1	.500000	.510484	-.010484
		STD2	2.00000	2.10188	-.101882
		STD3	10.0000	9.29593	.704085

rr Coef: 0.99966

ement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
s	317.933	BLANK	.000000	-.000303	.000303
		STD1	.500000	.530785	-.030785
		STD2	10.0000	9.91601	.083991
		STD3	50.0000	47.3415	2.65850

rr Coef: 0.99998

ement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
s	370.603	BLANK	.000000	-.001328	.001328
		STD1	.500000	.629475	-.129475
		STD2	10.0000	11.6871	-1.68714
		STD3	100.000	57.2337	42.7663

rr Coef: 0.99456

ement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
s	228.502	BLANK	.000000	-.000101	.000101
		STD1	.500000	.506826	-.006826
		STD2	2.00000	2.07491	-.074909
		STD3	10.0000	9.49439	.505614

rr Coef: 0.99993

ement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
s	228.616	BLANK	.000000	-.000090	.000090
		STD1	.500000	.505774	-.005774
		STD2	2.00000	2.07080	-.070798
		STD3	10.0000	9.53168	.468318

rr Coef: 0.99985

ement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
s	267.716	BLANK	.000000	-.000107	.000107
		STD1	.500000	.507151	-.007151
		STD2	2.00000	2.07257	-.072572
		STD3	10.0000	9.48728	.522738

rr Coef: 0.99999

lement	Wavelength	Standard	Concentration	Concentration	Concentration
	324.754	BLANK	.000000	.000012	-.000012
		STD1	.500000	.495801	.004199
		STD2	2.00000	2.08206	-.082061
		STD3	10.0000	9.77948	.220518

rfCoef: 0.99991

lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
	271.441	BLANK	.000000	-.000210	.000210
		STD1	.500000	.581098	-.081098
		STD2	10.0000	10.2801	-.280397
		STD3	50.0000	48.4107	1.58982

rfCoef: 0.99992

ement	Wavelength	Standard	known Concentration	Measured Concentration	Residual Concentration
	766.491	BLANK	.000000	.001118	-.001118
		STD1	.500000	.384128	.115872
		STD2	2.00000	2.00680	-.006598
		STD3	10.0000	12.3947	-2.39474

rfCoef: 0.99935

ement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
	670.784	BLANK	.000000	.001528	-.001528
		STD1	.500000	.344420	.155580
		STD2	2.00000	1.90316	.096841
		STD3	10.0000	13.5958	-3.59581

rfCoef: 0.99812

ment	Wavelength	Standard	known Concentration	Measured Concentration	Residual Concentration
	279.079	BLANK	.000000	-.000221	.000221
		STD1	.500000	.507811	-.007811
		STD2	10.0000	9.86639	.133614
		STD3	50.0000	47.8134	2.18663

rfCoef: 0.99988

ment	Wavelength	Standard	known Concentration	Measured Concentration	Residual Concentration
	257.610	BLANK	.000000	-.000180	.000180
		STD1	.500000	.515059	-.015059
		STD2	2.00000	2.08831	-.088305
		STD3	10.0000	9.22840	.771598

rfCoef: 0.99967

ment	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
	202.030	BLANK	.000000	-.000058	.000058
		STD1	.500000	.504640	-.004640
		STD2	2.00000	2.02816	-.028157
		STD3	10.0000	9.76913	.230888

rfCoef: 0.99997

ent	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
	588.995	BLANK	.000000	.000000	-.000000
		STD1	.500000	.473717	.026283
		STD2	10.0000	10.3976	-.397557
		STD3	50.0000	50.8975	-.897520

oef: 0.99999

000862

ement	Wavelength	Standard	Concentration	Concentration	Concentration
	221.604	BLANK	.000000	-.000099	.000099
		STD1	.500000	.506850	-.006850
		STD2	2.00000	2.07140	-.071398
		STD3	10.0000	9.50802	.490375

r ²: 0.99984

ement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
03/1	220.351	BLANK	.000000	.000002	-.000002
		STD1	.500000	.495864	.004136
		STD2	2.00000	2.08116	-.081163
		STD3	10.0000	9.75822	.241780

rCoef: 0.99989

ement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
03/2	220.352	BLANK	.000000	.000080	-.000080
		STD1	.500000	.489682	.010318
		STD2	2.00000	2.06095	-.060950
		STD3	10.0000	9.85250	.147503

rCoef: 0.99995

ement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
	206.838	BLANK	.000000	.000055	-.000055
		STD1	.500000	.491247	.008753
		STD2	2.00000	1.99376	.006244
		STD3	10.0000	10.0437	-.043688

rCoef: 1.00000

ement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
80/1	196.021	BLANK	.000000	.000025	-.000025
		STD1	.500000	.491012	.008988
		STD2	2.00000	2.07141	-.071405
		STD3	10.0000	9.78733	.212667

rCoef: 0.99993

ement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
80/2	196.022	BLANK	.000000	.000110	-.000110
		STD1	.500000	.482811	.017188
		STD2	2.00000	2.08521	-.085215
		STD3	10.0000	9.83151	.168481

rCoef: 0.99991

ement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
	189.989	BLANK	.000000	.002778	-.002778
		STD1	.500000	.159570	.340430
		STD2	2.00000	2.91330	-.913299
		STD3	10.0000	12.2421	-2.24211

rCoef: 0.99792

ment	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
	190.881	BLANK	.000000	.000130	-.000130
		STD1	.500000	.471127	[illegible]
		STD2	2.00000	1.87888	[illegible]
		STD3	10.0000	9.06283	[illegible]

lement	Wavelength	Standard	Concentration	Concentration	Concentration
	292.402	BLANK	.000000	-.000220	.000220
		STD1	.500000	.516108	- .016108
		STD2	10.0000	9.94905	.050953
		STD3	50.0000	47.7645	2.23550

or coef: 0.99997

lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
n	206.200	BLANK	.000000	-.000338	.000338
		STD1	.500000	.533161	-.033161
		STD2	10.0000	10.1711	-.171098
		STD3	50.0000	45.7688	4.23291

orr coef: 0.99971

lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
	220.353	BLANK	.000000	-.000000	.000000
		STD1	.500000	-.000000	.500000
		STD2	2.00000	.000000	2.00000
		STD3	10.0000	.000000	10.00000

orr coef: 0.62877

lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
	188.028	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

---

thod: NOALKW Sample Name: CHKSTD Operator:
n Time: 09/30/98 11:25:56
mment: CALIBRATION STANDARDS
de: CONC Corr. Factor: 1

le	Ag	Al	As	Ba	Be	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm
ge	9.827	19.59	9.781	Q9.152	Q9.229	Q17.15	Q9.182
ev	.082	.19	.125	.034	.055	.21	.103
SD	.8150	.3838	1.273	.3811	.6010	.5033	1.091
	9.578	19.37	9.902	Q9.185	Q9.238	Q17.37	9.601
	9.808	19.67	9.788	Q9.155	Q9.170	Q18.90	Q9.119
	9.898	19.73	9.653	Q9.117	Q9.279	Q17.19	Q9.198
ccors	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail	QC Fail	QC Fail
ine	10.00	50.00	10.00	10.00	10.00	50.00	10.00
nge	5.000	5.000	5.000	5.000	5.000	5.000	5.000

m	Co	Cr	Cu	Fe	K	Li	Mg
ts	ppm	ppm	ppm	ppm	ppm	ppm	ppm
ge	9.810	Q9.151	9.729	17.88	Q12.38	Q13.81	17.77
v	.089	.056	.081	.17	.08	.06	.10

0	.7132	.5928	.8283	.3851	.8583	.1226	.8278
	9.873	Q9.308	9.810	17.93	Q12.37	Q13.70	Q17.93
	9.537	Q9.150	9.750	17.68	Q12.11	Q13.81	17.92
	9.820	9.508	9.787	18.02	Q12.28	Q13.59	18.11

000864

Range	5.000	5.000	5.000	5.000	5.000	5.000	5.000
Elem	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	Q9.306	9.765	50.78	9.538	9.783	10.00	10.16
SDev	.040	.093	.35	.071	.036	.12	.03
%RSD	.4281	.9572	.6861	.7452	.3671	1.192	.3001
#1	Q9.292	9.852	51.19	9.619	9.820	10.12	10.18
#2	Q9.275	9.777	50.56	Q9.487	9.749	9.880	10.12
#3	Q9.351	9.666	50.59	9.507	9.780	10.00	10.18
Errors	QC Fail	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass
Value	10.00	10.00	50.00	10.00			10.00
Range	5.000	5.000	5.000	5.000			5.000
Elem	196071	196072	Sn	Ti	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	9.772	9.912	Q13.42	9.953	17.68	Q16.05	9.928
SDev	.101	.044	2.10	.116	.41	.42	.091
%RSD	1.032	.4404	15.62	1.169	.8571	.9154	.9210
#1	9.781	9.992	Q13.44	10.09	Q17.31	Q16.36	10.02
#2	9.682	9.913	Q11.31	9.908	17.55	Q15.57	9.936
#3	9.880	9.920	Q15.50	9.867	18.11	Q16.22	9.920
Errors	NOCHECK	NOCHECK	QC Fail	QC Pass	QC Pass	QC Fail	QC Pass
Value			10.00	10.00	50.00	50.00	10.00
Range			5.000	5.000	5.000	5.000	5.000

Elem	Se
Units	ppm
Avge	9.888
SDev	.050
%RSD	.5056
#1	9.927
#2	9.830
#3	9.900
Errors	QC Pass
Value	10.00
Range	5.000

AutoStd	1	2	3	4	5	6	7
Code	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	V	--	--	--	--	--	--
Wlen	380.082	--	--	--	--	--	--

Code	23818	--	--	--	--	--	--
Conc	48.01389	--	--	--	--	--	--
SD	.2013170	--	--	--	--	--	--
	23835	--	--	--	--	--	--
	23889	--	--	--	--	--	--

ethod: NOAIKW Sample Name: ICV Operator:
un Time: 09/30/98 11:31:15
omment: CALIBRATION STANDARDS
ode: CONC Corr. Factor: 1

	Ag	Al	As	Ba	Be	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9951	9.134	.9763	1.001	1.008	9.734	.9889
SDev	.0229	.222	.0367	.023	.021	.187	.0231
RSD	2.301	2.433	3.759	2.319	2.130	1.917	2.365
#1	.9887	Q8.880	.9373	.9747	.9843	9.523	.9882
#2	1.008	9.340	1.010	1.017	1.026	9.879	1.013
#3	1.010	9.182	.9814	1.012	1.015	9.788	.9877
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.000	10.00	1.000	1.000	1.000	10.00	1.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Item	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.001	.9670	.9793	.9992	Q.0025	Q.0063	1.012
SDev	.025	.0229	.0227	.0273	.0076	.0001	.023
RSD	2.511	2.361	2.323	2.732	306.0	7.218	2.318
#1	.9730	.9406	.9534	.9791	Q.0028	Q.0067	.9849
#2	1.022	.9797	.9861	1.030	Q-.0053	Q.0083	1.022
#3	1.009	.9807	.9883	.9882	Q.0099	Q.0058	1.027
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass
Value	1.000	1.000	1.000	1.000	10.00	10.00	1.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Item	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.9988	.9799	9.646	.9872	.9869	.9730	1.020
SDev	.0287	.0288	.338	.0154	.0209	.0232	.021
RSD	2.876	2.917	1.005	1.558	2.115	2.385	2.059
#1	.9679	.9535	9.243	.9895	.9631	.9466	1.015
#2	1.014	1.010	10.01	.9946	1.002	.9901	1.051
#3	1.015	.9759	9.682	.9975	.9960	.9825	1.022
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK
Value	1.000	1.000	10.00	1.000			
Range	10.00	10.00	10.00	10.00			

Item	1060/1	1060/2	Sn	Ti	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm

Avge	.9970	.9779	Q1.125	.9192	1.019	1.026	.9721
SDev	.0213	.0317	2.116	.0120	.020	.017	.0221
RSD	2.138	3.189	171.7	1.267	1.913	1.624	[illegible]
#1	.9881	.9125	Q-1.305	.9353	.9981	1.007	.9521
#2	1.021	1.001	Q3.119	.9566	1.031	1.028	.9910
#3	.9781	.9903	[illegible]	.9553	[illegible]		

000366

Errors	NOCHECK	NOCHECK	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value			1.000	1.000	1.000	1.000	1.000
Range			10.00	10.00	10.00	10.00	10.00

Item	Se
Units	ppm
Avg	.0346
SD	.0258
%RSD	2.589
#1	.0581
#2	1.009
#3	.0866

Errors	QC Pass
Value	1.000
Range	10.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Item	Y	--	--	--	--	--	--
Average	380.063	--	--	--	--	--	--
Avge	24861	--	--	--	--	--	--
SDev	625.1658	--	--	--	--	--	--
%RSD	2.514679	--	--	--	--	--	--
#1	25576	--	--	--	--	--	--
#2	24119	--	--	--	--	--	--
#3	24587	--	--	--	--	--	--

Method: NOAIKW Sample Name: ICB Operator:
Date: 09/30/98 11:38:34
Comment: CALIBRATION STANDARDS
Mode: CONC Corr. Factor: 1

Item	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	B.0021	.0295	I-.0056	B.0023	B.0026	.0133	B.0023
SDev	.0005	.0026	.0063	.0008	.0010	.0056	.0009
%RSD	25.88	8.830	114.0	32.68	38.98	42.32	40.15
#1	B.0028	.0281	.0017	B.0032	B.0037	.0187	B.0033
#2	B.0021	.0325	I-.0100	.0020	B.0022	.0106	B.0017
#3	B.0015	.0280	I-.0084	.0018	B.0018	.0095	B.0018
Errors	IC High	IC Pass	IC Low	IC High	IC High	IC Pass	IC High
High	.0007	.1000	.0040	.0020	.0002	.1000	.0003
Low	-.0007	-.1000	-.0040	-.0020	-.0002	-.1000	-.0003

Item	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	B.0025	B.0028	.0008	.0097	-.0080	.0021	B.0123
SDev	.0011	.0008	.0021	.0140	.0089	.0002	[illegible]
%RSD	43.53	27.18	252.1	144.5	148.2	10.13	19.13
#1	B.0028	B.0028	.0001	.0197	-.0080	.0026	B.0128

000867

23	H .0014	H.0022	H .0032	.0157	- .0138	.0029	.0072
rrors	IC High	IC High	IC Pass	IC Pass	IC Pass	IC Pass	IC High
igh	.0010	.0010	.0010	.0200	.1000	.0050	.0080
ow	-.0010	-.0010	-.0010	-.0200	-.1000	-.0050	-.0080
1	Mn	Mo	Na	Ni	220371	220372	Sb
r	ppm	ppm	ppm	ppm			ppm
vge	.0022	H.0052	.0213	.0030	.0078	.0079	H.0106
Dev	.0008	.0015	.0040	.0018	.0041	.0088	.0060
RSD	38.12	28.80	18.52	61.14	52.95	111.3	56.57
1	H.0031	H .0068	.0255	H.0050	.0082	.0173	H .0058
2	.0012	H .0043	.0208	.0020	.0125	.0087	H.0173
3	.0017	H.0043	.0176	.0018	.0047	- .0002	H .0090
rrors	IC Pass	IC High	IC Pass	IC Pass	NOCHECK	NOCHECK	IC High
igh	.0020	.0020	.2000	.0050			.0040
ow	- .0020	-.0020	-.2000	-.0050			- .0040
tem	198071	198072	Sn	Tl	V	Zn	Pb
ite			ppm	ppm	ppm	ppm	ppm
vge	- .0014	.0071	.1110	.0039	H.0084	H.0081	H.0079
Dev	.0056	.0157	1.141	.0101	.0025	.0072	.0081
RSD	399.8	212.8	277.6	259.1	29.46	27.28	77.55
1	-.0035	.0012	-.8654	.0058	H.0112	H.0110	H.0138
2	.0048	.0253	.7675	H.0128	H.0073	H.0070	H.0086
3	-.0056	-.0043	1.331	-.0070	H.0067	H.0071	.0014
rrors	NOCHECK	NOCHECK	NOCHECK	IC Pass	IC High	IC High	IC High
igh				.0080	.0030	.0050	.0030
ow				-.0080	-.0030	-.0050	-.0030

em	Se
ite	ppm
vge	H .0048
Dev	.0123
RSD	257.6
1	-.0001
2	H .0128
3	-.0011
rrors	IC High
igh	.0040
ow	-.0040

St	1	2	3	4	5	6	7
e	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
m	\	--	--	--	--	--	--
len	360.083	--	--	--	--	--	--
e	24873	--	--	--	--	--	--
y	92.83518	--	--	--	--	--	--
3	2721289	--	--	--	--	--	--

#1	21976	--	--	--	--	--	--
#2	21812	--	--	--	--	--	--
#3	21798	--	--	--	--	--	--

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ethod: NOAIKW Sample Name: ICSA Operator:
n Time: 09/20/98 11:41:53
or #: CALIBRATION STANDARDS
on CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0010	237.1	-.0194	-.0031	-.0008	226.9	.0018
SDev	.0008	.9	.0189	.0001	.0001	1.0	.0003
%RSD	79.53	.3903	97.48	3.811	12.40	.4205	8.181
#1	.0014	236.9	-.0245	-.0030	-.0008	227.3	.0043
#2	.0014	238.1	-.0353	-.0031	-.0007	227.6	.0018
#3	.0001	238.3	.0015	-.0032	-.0005	225.8	.0017
Errors	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value		250.0				250.0	
Range		20.00				20.00	

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0008	.0328	.0071	89.75	.0160	.0022	232.0
SDev	.0004	.0002	.0013	.56	.0081	.0001	1.1
%RSD	52.58	.6788	18.47	.6263	50.85	2.948	.4703
#1	.0003	.0330	.0062	90.39	.0248	.0022	231.2
#2	.0011	.0327	.0085	89.34	.0148	.0022	232.1
#3	.0010	.0328	.0086	89.52	.0087	.0021	232.7
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK	QC Pass
Value				100.0			250.0
Range				20.00			20.00

Elem	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.0384	-.0032	.0252	.0041	-.0389	.0118	.0123
SDev	.0004	.0025	.0013	.0008	.0066	.0039	.0092
%RSD	.9291	78.69	5.185	19.88	16.88	32.87	75.12
#1	.0388	-.0042	.0260	.0033	-.0436	.0162	.0208
#2	.0383	-.0003	.0260	.0049	-.0417	.0089	.0025
#3	.0380	-.0051	.0237	.0040	-.0314	.0103	.0124
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							

n

Elem	196071	196072	Sn	Ti	V	Zn	Rh
Units			ppm	ppm	ppm	ppm	ppm
Avge	-.0083	.0182	30.94	-.0042	.0054	.0093	-.0051
SDev	.0274	.0170	1.12	.0331	.0004	.0023	.0025
%RSD	131.1	93.82	3.629	781.1	8.000	21.17	[illegible]

000869

=1	- .0098	- .0015	30.43	-.0366	.0052	.0118	- .0037
=2	.0227	.0269	32.22	.0296	.0059	.0093	- .0080
=3	-.0317	.0290	30.16	-.0058	.0051	.0071	-.0038
rrors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
ial %							
%							

Item	Se
Units	ppm
Avge	.0101
SDev	.0149
%RSD	144.0
=1	-.0039
=2	.0259
=3	.0092
rrors	NOCHECK
alue	
ange	

ntStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
tem	Y	--	--	--	--	--	--
avlen	360.083	--	--	--	--	--	--
vge	22488	--	--	--	--	--	--
dev	152.8471	--	--	--	--	--	--
RSD	.6803399	--	--	--	--	--	--
	22290	--	--	--	--	--	--
	22581	--	--	--	--	--	--
	22548	--	--	--	--	--	--

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hod: NOAIKW Sample Name: ICSAB Operator:
Time: 09/30/98 11:17:12
ment: CALIBRATION STANDARDS
e: CONC Corr. Factor: 1

pm	Ag	Al	As	Ba	Be	Ca	Cd
its	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	1.041	242.5	.4858	.5073	.5017	231.9	.9862
dev	.005	4.8	.0198	.0020	.0060	2.3	.0031
SD	.4898	1.984	4.083	.5894	1.199	.9900	.3248
	1.039	246.8	.5046	.5041	.5051	233.2	.9827
	1.047	243.4	.4877	.5078	.5053	233.3	.9873
	1.038	237.3	.4850	.5100	.4948	229.3	.9837

ode	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
ue	1.000	250.0	.5000	.5000	.5000	250.0	1.000
ge	20.00	20.00	20.00	20.00	20.00	20.00	[illegible]

000870

m	Co	Cr	Cu	Fe	K	Li	Mg
its	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	.1780	.5195	.5170	91.00			

RSD	1.915	5682	1614	1.100	58.90	1.681	7822
1	.1882	.5147	.5187	89.97	Q.0070	Q.0018	240.3
2	.1795	.5155	.5178	91.36	Q.0186	Q.0019	239.3
3	.1861	.5101#	.5469	91.91	Q.0076	Q.0018	238.6
r	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass
alue	.5000	.5000	.5000	100.0	.5000	1.000	250.0
ange	20.00	20.00	20.00	20.00	20.00	20.00	20.00
tem	Mn	Mo	Na	Ni	220371	220372	Pb
nits	ppm	ppm	ppm	ppm			ppm
vge	.5275	Q.0022	Q1.176	.9282	.9352	1.011	.5172
Dev	.0017	.0020	.018	.0078	.0057	.023	.0121
RSD	.3231	87.70	1.237	.8231	.6065	2.235	2.273
1	.5221	Q.0045	Q1.158	.9224	.9302	.9872	.5284
2	.5292	Q.0016	Q1.176	.9375	.9414	1.011	.5158
3	.5310	Q.0007	Q1.194	.9279	.9312	1.034	.5529
rrors	QC Pass	QC Fail	QC Fail	QC Pass	NOCHECK	NOCHECK	QC Pass
alue	.5000	1.000	1.000	1.000			.5000
ange	20.00	20.00	20.00	20.00			20.00
tem	196071	196072	Sn	Ti	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vge	.1114	.1338	Q31.53	.5174	.1964	.9544	.9855
Dev	.0213	.0335	3.91	.0341	.0040	.0228	.0163
RSD	1.824	7.621	12.38	6.590	.8169	2.390	1.650
1	.1501	.1018	Q32.81	.5317	.1949	.9289	.9897
2	.1178	.1645	Q27.15	.5121	.5010	.9615	.9878
3	.1173	.1532	Q31.64	.1785	.1933	.9728	1.000
rrors	NOCHECK	NOCHECK	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
alue			1.000	.5000	.5000	1.000	1.000
ange			20.00	20.00	20.00	20.00	20.00
tem	Se						
nits	ppm						
vge	.1107						
Dev	.0170						
RSD	3.851						
1	.1211						
2	.1193						
3	.1518						
rrors	QC Pass						

alue	.5000					
ange	20.00					
atStd	1	2	3	4	5	6
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
tem	Y	--	--	--	--	--

000871

SDev	188.5581	--	--	--	--	--	--
%RSD	.8857510	--	--	--	--	--	--
#1	22378	--	--	--	--	--	--
#2	22138	--	--	--	--	--	--
#3	21881	--	--	--	--	--	--

ysis Report Wed 09-30-98 12:06:20 PM page 1

20 OALKW Sample Name: PB M8951 Operator: JC
Date: 09/30/98 12:01:21
ment: M8951 R#0372
CONC Corr Factor: 1

000872

	Ag	Al	As	Ba	Be	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm

RSD	15.8	32.61	104.2	36.04	13.75	15.45	107.5
1	-.0003	H.1941	I-.0050	H.0031	.0002	.0774	H.0004
2	-.0001	H.3863	I-.0115	H.0068	H.0002	H.1030	.0001
3	-.0000	H.3059	-.0001	H.0055	.0002	.0827	.0001
nrs	IC Pass	IC High	IC Low	IC High	IC High	IC Pass	IC Pass
igh	.0007	.1000	.0040	.0020	.0002	.1000	.0003
ow	-.0007	-.1000	-.0040	-.0020	-.0002	-.1000	-.0003
lem	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	.0002	.0003	I-.0015	H.0245	H.1714	.0019	H.0250
Dev	.0007	.0000	.0003	.0085	.0465	.0001	.0123
RSD	200.9	.8908	20.30	34.87	27.13	6.252	49.40
1	H.0011	.0003	I-.0018	H.0331	H.1239	.0017	H.0386
2	-.0001	.0003	I-.0013	H.0242	H.2169	.0020	H.0153
3	-.0002	.0003	I-.0013	.0160	H.1736	.0019	H.0207
nrs	IC Pass	IC Pass	IC Low	IC High	IC High	IC Pass	IC High
igh	.0010	.0010	.0010	.0200	.1000	.0050	.0080
ow	-.0010	-.0010	-.0010	-.0200	-.1000	-.0050	-.0080
lem	Mn	Mo	Na	Ni	220371	220372	Sb
nits	ppm	ppm	ppm	ppm			ppm
vge	-.0001	I-.0021	H1.177	.0003	.0033	.0067	H.0062
Dev	.0001	.0018	.433	.0009	.0062	.0047	.0051
RSD	121.1	86.70	29.34	311.2	186.7	69.58	82.15
1	-.0001	I-.0035	H1.019	-.0008	.0017	.0021	H.0106
2	-.0001	I-.0027	H1.880	.0011	.0101	.0067	.0008
3	.0000	-.0001	H1.531	.0003	-.0019	.0114	H.0073
nrs	IC Pass	IC Low	IC High	IC Pass	NOCHECK	NOCHECK	IC High
igh	.0030	.0020	.2000	.0050			.0040
ow	-.0030	-.0020	-.2000	-.0050			-.0040
lem	1960/1	1960/2	Sn	Tl	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vge	-.0009	.0198	.8813	.0048	.0002	H.0090	H.0058
Dev	.0207	.0118	.7002	.0214	.0004	.0021	.0032
RSD	2196.	59.84	79.45	489.7	189.0	22.82	56.92
1	.0134	.0160	1.109	I-.0190	.0006	H.0070	.0019
2	.0084	.0103	1.439	H.0228	-.0000	H.0000	H.0072
3	-.0247	.0331	.0957	H.0099	.0000	H.0111	H.0070
nrs	NOCHECK	NOCHECK	NOCHECK	IC Pass	IC Pass	IC High	IC High

igh	.0080	.0030	.0050	.0030
ow	-.0080	-.0030	-.0050	-.0030

000873

lem	Se
nits	ppm
vge	H.0132

=1	8.0154
=2	8.0100
=3	8.0142

-r	IC High
ig	.0010
ow	- 0010

ntStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
tem	\	--	--	--	--	--	--
avlen	360.083	--	--	--	--	--	--
vge	24871	--	--	--	--	--	--
Dev	183.0273	--	--	--	--	--	--
RSD	.7358178	--	--	--	--	--	--
=1	24832	--	--	--	--	--	--
=2	25021	--	--	--	--	--	--
=3	24889	--	--	--	--	--	--

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thod: NOAIKW Sample Name: PS M8954 / Operator: JC
n Time: 09/30/98 12:08:28
mment: M8954 R#0372
de: CONC Corr. Factor: 1

tem	Ag	Al	As	Ba	Be	Ca	Cd
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	.0451	4.822	4.483	4.873	4.707	4.791	4.809
Dev	.0008	.131	.059	.043	.050	.066	.021
SD	1.115	2.839	1.307	.9166	1.058	1.377	.4450
1	.0448	4.603	4.501	4.835	4.702	4.774	4.588
2	.0450	4.604	4.531	4.719	4.660	4.735	4.818
3	.0459	4.784	4.418	4.884	4.759	4.861	4.825
rrors	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass
igh	.0575	5.750	5.750	5.750	5.750	5.750	5.750
ow	.0425	4.250	4.250	4.250	4.250	4.250	4.250

tem	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	4.799	4.528	4.783	4.812	14.198	1.0020	4.783
Dev	.060	.029	.037	.047	.097	.0001	.022
RSD	1.258	.6492	.7761	1.018	2.301	3.573	.4604
1	4.732	4.506	4.747	4.569	14.091	1.0019	4.771
2	4.849	4.543	4.780	4.862	14.223	1.0020	4.794
3	4.815	4.561	4.821	4.803	14.280	1.0021	4.815

rrors	IC Pass	IC Pass	IC Pass	IC Pass	IC Low	IC Low	IC Pass
igh	5.750	5.750	5.750	5.750	57.50	5.750	5.750
ow	4.250	4.250	4.250	4.250	42.50	4.250	4.250

tem	Mn	Mo	Na	Ni	220371	220372	Sb

000874

SDev	.058	015	506	022	.044	040	051
RSD	1.288	.3124	8.773	.4596	.9427	.8572	1.133
=1	4.614	4.683	5.186	4.734	4.651	4.581	4.727
=2	4.729	4.7014	86.067	4.702	4.739	4.653	4.725
=3	4.687	4.712	86.058	4.743	4.705	4.645	4.819
rrors	LC Pass	LC Pass	LC High	LC Pass	NOCHECK	NOCHECK	LC Pass
igh	5.750	5.750	5.750	5.750			5.750
ow	4.250	4.250	4.250	4.250			4.250
lem	196071	196072	Sn	Tl	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vge	4.421	4.280	12.034	4.627	4.799	4.641	4.850
SDev	.058	.091	1.148	.061	.036	.058	.011
RSD	1.275	2.067	58.47	1.321	.7550	1.259	.8773
=1	4.358	4.385	12.623	4.559	4.758	4.580	4.864
=2	4.444	4.477	12.767	4.646	4.809	4.696	4.882
=3	4.462	4.298	1.7102	4.676	4.828	4.646	4.885
rrors	NOCHECK	NOCHECK	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
igh			5.750	5.750	5.750	5.750	5.750
ow			4.250	4.250	4.250	4.250	4.250

lem	Se
nits	ppm
vge	4.384
Dev	.083
RSD	1.431
=1	4.383
=2	4.487
=3	4.353
rrors	LC Pass
igh	5.750
ow	4.250

ntStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
lem	Y	--	--	--	--	--	--
avlen	360.073	--	--	--	--	--	--
vge	24371	--	--	--	--	--	--
Dev	196.7184	--	--	--	--	--	--
RSD	.8070838	--	--	--	--	--	--
=1	24599	--	--	--	--	--	--

=2	24233	--	--	--	--	--	--
=3	24281	--	--	--	--	--	--

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thod: NOA1KW Sample Name: 84192-8743 Operator: JC 000875
n Time: 09/30/98 12:11:38
mment: M8954 R#0372

Item	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1-.0001	.1542	1-.0005	.0308	.0037	11.09	.0030
SDev	.0001	.0176	.0053	.0007	.0012	.13	.0017
%RSD	173.8	11.41	1089.	2.284	33.46	1.212	55.84
#1	1.0000	.1341	1.0017	.0316	.0051	11.08	.0043
#2	1-.0000	.1620	1.0033	.0307	.0031	11.23	.0037
#3	1-.0002	.1688	1-.0065	.0302	.0028	10.96	.0011
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
High	30.00	1400.	60.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Item	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0028	.0081	1.0001	.0220	1.548	.0195	2.622
SDev	.0014	.0016	.0015	.0132	.030	.0002	.032
%RSD	48.77	25.98	1203.	60.20	1.917	1.203	1.261
#1	.0042	.0078	1.0017	.0334	1.513	.0193	2.628
#2	.0029	.0059	1.0000	.0251	1.570	.0198	2.654
#3	.0014	.0047	1-.0013	1.0075	1.558	.0198	2.588
Errors	IC Pass	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
High	30.00	80.00	60.00	400.0	30.00	9.000	1400.
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Item	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.0036	.0085	10.06	1.0048	.0075	.0089	.0216
SDev	.0011	.0053	.18	.0026	.0073	.0040	.0118
%RSD	31.21	62.27	1.830	53.46	98.31	44.45	54.54
#1	.0018	.0145	9.852	.0053	.0099	.0044	.0321
#2	.0033	.0059	10.15	.0070	-.0008	.0113	.0240
#3	1.0028	.0050	10.19	1.0020	.0132	.0111	.0088
Errors	IC Pass	IC Pass	IC Pass	IC Low	NOCHECK	NOCHECK	IC Pass
High	30.00	80.00	200.0	30.00			80.00
Low	.0030	.0020	.2000	.0050			.0040

Item	1980/1	1980/2	Sn	Ti	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	-.0028	.0306	1.177	.0116	.0091	.0130	.0084
SDev	.0213	.0061	.541	.0077	.0014	.0001	.0030
%RSD	758.1	20.05	45.94	66.10	15.73	.7355	35.43
#1	-.0152	.0268	.9404	.0171	.0107	.0130	.0062

#2	.0218	.0072	1.795	.0145	.0087	.0131	.0073
#3	-.0150	.0377	.7911	1.0029	.0079	.0129	.0118
Errors	NOCHECK	NOCHECK	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass
High			50.00	80.00	220.0	50.00	80.00
Low			.0030	.0020	.0030	.0050	[illegible]

000876

nits	ppm
vgn	.0198
Dev	.0062
RSD	31.91
1	.0132
2	.0257
3	.0205
rrors	IC Pass
igh	80.00
ow	.0040

ntStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
tem	Y	--	--	--	--	--	--
avlen	360.062	--	--	--	--	--	--
vge	24989	--	--	--	--	--	--
Dev	165.9950	--	--	--	--	--	--
RSD	.6642831	--	--	--	--	--	--
1	25028	--	--	--	--	--	--
2	24808	--	--	--	--	--	--
3	25127	--	--	--	--	--	--

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thod: NOAH8W Sample Name: 8744 MS Operator: JC
n Time: 09/30/98 12:16:44
mment: M8054 R#0272
de: CONC Corr. Factor: 1

	Ag	Al	As	Ba	Be	Ca	Cd
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	.0411	4.546	4.418	4.636	4.685	15.79	4.576
Dev	.0005	.040	.040	.045	.036	.12	.057
RSD	1.119	.8782	.9052	.9845	.7595	.7312	1.243
1	.0435	4.501	4.373	4.630	4.677	15.70	4.545
2	.0415	4.578	4.431	4.595	4.723	15.92	4.542
3	.0413	4.558	4.449	4.684	4.653	15.75	4.642
rrors	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass
igh	30.00	1400.	80.00	27.00	30.00	1400.	15.00
ow	.0005	.1000	.0100	.0050	.0010	.0500	.0010

tem	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	4.781	4.500	4.741	4.580	6.109	.0222	7.388
Dev	.024	.035	.031	.048	.067	.0003	.050
RSD	.5028	.7810	.6509	1.043	1.097	1.413	.6874

1	4.734	4.526	4.719	4.582	6.041	.0219	7.430
2	4.768	4.514	4.776	4.627	6.111	.0222	7.402
3	4.781	4.480	4.727	4.532	6.175	.0225	
rrors	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass

Item	Mn	Mo	Na	Ni	220371	220372	Sb
nits	ppm	ppm	ppm	ppm			ppm
vge	1.829	4.880	15.59	4.677	4.655	4.623	4.689
Dev	.026	.0854	.34	.051	.066	.023	.031
SD	.5717	1.820	2.197	1.089	1.408	.5071	.7341
1	1.835	4.870	15.35	4.658	4.607	4.607	4.680
2	1.852	4.570	15.43	4.638	4.628	4.612	4.630
3	1.800	4.739	15.98	4.735	4.730	4.650	4.696
rrors	IC Pass	IC Pass	IC Pass	IC Pass	NOCHECK	NOCHECK	IC Pass
igh	30.00	60.00	200.0	30.00			60.00
ow	.0030	.0020	.2000	.0050			.0040

Item	196071	196072	Sn	Tl	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vge	4.420	4.408	3.453	4.697	4.775	4.619	4.634
Dev	.038	.075	1.346	.098	.021	.047	.037
SD	.8547	1.710	38.98	2.088	.4336	1.026	.8084
1	4.377	4.346	2.350	4.706	4.778	4.589	4.607
2	4.446	4.380	3.056	4.594	4.793	4.671	4.617
3	4.437	4.490	4.954	4.790	4.752	4.596	4.677
rrors	NOCHECK	NOCHECK	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass
igh			50.00	60.00	220.0	50.00	30.00
ow			.0030	.0080	.0030	.0050	.0030

Item	Se
nits	ppm
vg	1.411
Dev	.059
SD	1.328
1	1.357
2	1.403
3	1.473
rrors	IC Pass
igh	60.00
ow	.0040

ntStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Item	\	--	--	--	--	--	--
avlen	380.063	--	--	--	--	--	--
vge	24311	--	--	--	--	--	--

Dev	185.2917	--	--	--	--	--	--
SD	.7821721	--	--	--	--	--	--
1	24175	--	--	--	--	--	--
2	24318	--	--	--	--	--	--
3	24110	--	--	--	--	--	--

m Time: 09/30/98 12:21:52
mment: M8954 R#0372
de: CONC Corr. factor: 1

Item	Ag	Al	As	Ba	Be	Ca	Cd
n	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vg	.0119	1.800	1.458	1.680	1.713	15.89	1.822
Dev	.0001	.047	.066	.058	.042	.17	.078
RSD	.8231	1.012	1.481	1.251	.8856	1.068	1.888
1	.0121	1.844	1.519	1.715	1.792	16.07	1.709
2	.0117	1.551	1.388	1.687	1.723	15.74	1.599
3	.0118	1.806	1.466	1.599	1.715	15.85	1.557
rrors	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass
igh	30.00	1400.	60.00	22.00	30.00	1400	15.00
ow	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Item	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	1.801	4.599	4.772	4.683	6.102	.0222	7.515
Dev	.096	.035	.043	.029	.125	.0003	.053
RSD	1.096	.7511	.9020	.6260	2.054	1.451	.7095
1	4.907	4.634	4.820	4.715	6.245	.0225	7.565
2	4.788	4.599	4.756	4.675	6.046	.0222	7.520
3	4.717	4.564	4.738	4.658	6.014	.0219	7.459
rrors	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass
igh	30.00	60.00	60.00	400.0	30.00	9.000	1400.
ow	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Item	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
nits	ppm	ppm	ppm	ppm			ppm
vge	1.722	1.727	15.85	1.710	1.715	1.676	1.918
Dev	.057	.094	.29	.058	.058	.038	.051
RSD	1.208	1.878	1.800	1.219	1.194	.8190	1.081
1	1.785	1.820	16.17	1.806	1.771	1.714	5.003
2	1.708	1.705	15.75	1.711	1.709	1.677	4.938
3	1.671	1.647	15.62	1.701	1.662	1.638	4.897
rrors	IC Pass	IC Pass	IC Pass	IC Pass	NOCHECK	NOCHECK	IC Pass
igh	30.00	80.00	200.0	30.00			60.00
ow	.0030	.0020	.2000	.0050			.0040

Item	1980/1	1980/2	Sn	Tl	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vge	1.100	1.141	3.899	1.782	1.834	1.681	1.889

Dev	.098	.081	1.812	.091	.018	.058	.014
RSD	1.500	1.831	41.35	1.885	.8158	1.817	.8158
	1.127	1.531	5.323	1.875	1.870	1.758	1.731
	1.118	1.102	2.149	1.730	1.850	1.840	1.888
	1.321	1.387	1.228	1.713	1.793	[illegible]	

igh	50.00	80.00	220.0	50.00	30.00
ow	.0030	.0080	.0030	.0050	.0030

tem	Se
nits	ppm
v	1.177
Dev	.067
RSD	1.511
=1	1.189
=2	1.117
=3	1.288
rrors	IC Pass
igh	80.00
ow	.0040

ntStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
tem	Y	--	--	--	--	--	--
avlen	260.083	--	--	--	--	--	--
vge	23989	--	--	--	--	--	--
Dev	301.0198	--	--	--	--	--	--
RSD	1.255872	--	--	--	--	--	--
=1	23815	--	--	--	--	--	--
=2	24022	--	--	--	--	--	--
=3	24210	--	--	--	--	--	--

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thod: NOAIKW Sample Name: 8739 Operator: JC
n e: 09/30/98 12:27:00
m : M8954 R#0372
de: CONC Corr. Factor: 1

tem	Ag	Al	As	Ba	Be	Ca	Cd
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	1.0001	.3222	1.0057	.0254	.0041	15.30	.0038
Dev	.0005	.0204	.0179	.0004	.0012	.39	.0014
RSD	128.8	6.317	315.5	1.443	28.98	2.518	38.08
=1	.0010	.2887	1-.0118	.0255	.0054	14.86	.0053
=2	1.0007	.3335	1.0049	.0258	.0038	15.53	.0033
=3	1.0001	.3344	.0240	.0250	.0031	15.52	.0027
rrors	IC Low	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
igh	30.00	1400.	80.00	27.00	30.00	1400.	15.00
ow	.0005	.1000	.0100	.0050	.0010	.0500	.0010
tem	Co	Cr	Cu	Fe	K	Li	Mg

nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	.0035	.0079	1.0015	.0958	1.518	.0241	3.007
Dev	.0010	.0009	.0005	.0093	.107	.0021	.128
RSD	27.69	11.68	36.83	9.715	7.057	8.197	
=1	.0016	.0087	.0021	.0958	1.395	.0218	2.981

rrors	IC Pass	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
igh	30.00	60.00	60.00	100.0	30.00	9.000	1100.
ow	.0010	.0020	.0020	.0100	.1000	.0050	.0080

	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
nits	ppm	ppm	ppm	ppm			ppm
vge	.0087	.0099	12.08	.0053	.0117	.0118	.0287
Dev	.0010	.0012	.87	.0029	.0066	.0073	.0098
RSD	14.79	11.81	7.187	55.52	56.01	63.11	34.30
1	.0078	.0112	11.08	.0082	.0193	.0083	.0283
2	.0088	.0098	12.60	.0055	.0084	.0061	.0269
3	.0058	.0088	12.56	1.0023	.0071	.0200	.0198

rrors	IC Pass	IC Pass	IC Pass	IC Pass	NOCHECK	NOCHECK	IC Pass
igh	30.00	60.00	200.0	30.00			60.00
ow	.0030	.0020	.2000	.0050			.0040

lem	1960/1	1960/2	Sn	Tl	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vge	-.0041	.0239	2.131	.0087	.0144	.0170	.0118
Dev	.0075	.0148	1.118	.0187	.0015	.0011	.0011
RSD	184.2	60.77	45.91	192.1	10.31	6.469	37.68
1	-.0127	.0106	2.018	.0191	.0161	.0172	.0120
2	-.0007	.0137	3.688	.0178	.0140	.0180	.0071
3	.0012	.0175	1.558	1-.0108	.0132	.0158	.0158

rrors	NOCHECK	NOCHECK	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass
			50.00	80.00	220.0	50.00	30.00
ow			.0030	.0080	.0030	.0050	.0020

lem	Se
nits	ppm
vge	.0149
Dev	.0073
RSD	48.87
1	.0232
2	.0092
3	.0124

rrors	IC Pass
igh	80.00
ow	.0040

stStd	1	2	3	4	5	6	7

ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
lem	Y	--	--	--	--	--	--
avlen	360.082	--	--	--	--	--	--
vge	24053	--	--	--	--	--	--
Dev	522.9114	--	--	--	--	--	--
RSD	2.174027	--	--	--	--	--	

000881

#2	23715	--	--	--	--	--	--
#3	23788	--	--	--	--	--	--

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thod: NOAIKW Sample Name: 8740 Operator: JC

n Time: 08/30/98 12:32#08

mr t: M8951 R#0372

d ONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	1-.0004	.3828	1.0021	.0188	.0013	9.883	1.0003
Dev	.0001	.0063	.0203	.0004	.0002	.101	.0003
RSD	14.02	1.725	974.2	2.187	16.85	1.026	98.25
#1	1-.0003	.3680	.0254	.0189	.0015	9.943	1.0003
#2	1-.0004	.3841	1-.0121	.0187	.0011	9.940	1.0006
#3	1-.0004	.3558	1-.0070	.0182	.0013	9.788	1.0000
rrors	IC Low	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Low
igh	30.00	1400.	60.00	27.00	30.00	1400.	15.00
ow	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Elem	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	1.0009	.0051	1-.0004	.1675	1.304	.0219	2.750
Dev	.0007	.0008	.0004	.0098	.014	.0002	.012
RSD	73.89	15.21	102.3	5.712	1.103	1.105	.4248
#1	1.0004	.0058	1-.0001	.1648	1.289	.0217	2.756
#2	1.0007	.0042	1-.0003	.1598	1.317	.0222	2.758
#3	.0018	.0052	1-.0008	.1782	1.305	.0219	2.737
rrors	IC Low	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
igh	30.00	60.00	60.00	400.0	30.00	9.000	1400.
ow	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Elem	Mn	Mo	Na	Ni	220371	220372	Sb
nits	ppm	ppm	ppm	ppm			ppm
vge	.0085	.0043	10.99	1.0042	.0052	.0004	.0080
Dev	.0001	.0009	.11	.0013	.0013	.0039	.0043
RSD	.8933	20.86	1.042	31.49	24.49	953.3	53.13
#1	.0085	.0034	10.87	1.0029	.0067	.0048	.0075
#2	.0085	.0051	11.10	1.0042	.0042	-.0032	.0041
#3	.0084	.0043	11.00	.0056	.0048	-.0001	.0125
rrors	IC Pass	IC Pass	IC Pass	IC Low	NOCHECK	NOCHECK	IC Pass
igh	30.00	60.00	200.0	30.00			60.00
ow	.0020	.0020	.2000	.0050			.0040

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Elem	198071	198072	Sn	Ti	V	Zn	[illegible]
nits			ppm	ppm	ppm	ppm	
vge	- .0019	.0087	2.121	1-.0022	.0093	.0100	1.0020
Dev	.0305	.0174	1.053	.0120	.0004	.0012	.0031
RSD	1851.	200.3	49.83	537.9	4.284	12.09	151.2

000882

=2	- .0360	.0167	1.068	.0113	.0088	.0093	1- .0008
=3	.0073	-.0134	3.173	1-.0115	.0095	.0114	1 .0015
rrors	NOCHECK	NOCHECK	IC Pass	IC Low	IC Pass	IC Pass	IC Low
igh			50.00	60.00	220.0	50.00	30.00
ow			.0030	.0080	.0030	.0050	.0030

lem	Se
nits	ppm
vge	.0017
Dev	.0133
RSD	318.7
=1	.0192
=2	1- .0005
=3	1- .0082
rrors	IC Pass
igh	60.00
ow	.0040

ntStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
lem	Y	--	--	--	--	--	--
avlen	360.063	--	--	--	--	--	--
vge	24325	--	--	--	--	--	--
Dev	11.52340	--	--	--	--	--	--
RSD	.1830381	--	--	--	--	--	--
=1	24322	--	--	--	--	--	--
=2	24370	--	--	--	--	--	--
=3	24281	--	--	--	--	--	--

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thod: NOAIKW Sample Name: 8741 Operator: JC
n Time: 09/30/98 12:37:18
mment: M8951 V#0372
de: CONC Corr. Factor: 1

lem	Ag	Al	As	Ba	Be	Ca	Cd
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	1- .0002	.2363	1-.0021	.0084	1.0002	9.681	1.0000
Dev	.0001	.0151	.0080	.0001	.0002	.072	.0008
RSD	49.32	6.382	378.1	1.236	120.0	.7477	1835.
=1	1-.0002	.2431	1-.0003	.0085	1.0004	9.600	1.0003
=2	1-.0003	.2467	1-.0109	.0084	1.0002	9.641	1-.0007
=3	1-.0001	.2190	1.0049	.0083	1-.0000	9.741	1.0005
rrors	IC Low	IC Pass	IC Low	IC Pass	IC Low	IC Pass	IC Low

igh	30.00	1400.	60.00	27.00	30.00	1400.	15.00
ow	.0005	.1000	.0100	.0050	.0010	.0500	.0010

000883

lem	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	1- .0001	.0051	1-.0027	.0253	1.388	.0226	2.899

1	L-.0007	.0047	L-.0027	.0314	1.366	.0222	2.921
2	L-.0001	.0053	L-.0030	.0270	1.415	.0230	2.905
3	L-.0004	.0053	L-.0025	.0177	1.381	.0227	2.871

rr	LC Low	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
igh	30.00	60.00	60.00	400.0	30.00	9.000	1400.
ow	.0010	.0020	.0020	.0100	.1000	.0050	.0080

lem	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
nits	ppm	ppm	ppm	ppm			ppm
vge	L.0005	.0031	11.16	L.0012	.0015	.0069	L.0030
Dev	.0001	.0028	.15	.0007	.0052	.0041	.0010
RSD	18.38	88.55	1.308	39.79	344.3	60.11	32.55
1	L.0005	.0082	11.00	L.0025	-.0036	.0079	L.0024
2	L.0004	.0025	11.28	L.0011	.0012	.0104	L.0024
3	L.0005	L.0007	11.21	L.0018	.0068	.0023	.0041

rrors	LC Low	LC Pass	LC Pass	LC Low	NOCHECK	NOCHECK	LC Low
igh	30.00	60.00	200.0	30.00			60.00
ow	.0030	.0020	.2000	.0050			.0040

lem	1960/1	1960/2	Sn	Tl	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vge	-.0070	.0161	2.803	L-.0067	.0115	.0109	.0051
Dev	.0109	.0062	1.008	.0028	.0004	.0012	.0019
RSD	154.8	38.27	35.95	42.17	3.810	11.28	38.17
1	.0031	.0115	3.366	L-.0100	.0118	.0115	.0041
2	-.0185	.0137	1.639	L-.0052	.0118	.0116	.0073
3	-.0058	.0231	3.403	L-.0049	.0110	.0095	.0039

rrors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
igh			50.00	60.00	220.0	50.00	30.00
ow			.0030	.0080	.0030	.0050	.0020

lem	Se
nits	ppm
vge	.0087
Dev	.0053
RSD	60.57
1	.0091
2	L.0033
3	.0138

rrors	LC Pass
igh	60.00

ow .0040

atStd	1	2	3	4	5	6	7
	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	
lem	Y	--	--	--	--	--	--
avlen	360.063	--	--	--	--	--	--
ode	22000						

000884

%RSD	3479800	--	--	--	--	--	--
#1	23894	--	--	--	--	--	--
#2	23741	--	--	--	--	--	--
#3	23873	--	--	--	--	--	--

: NOAIKW Sample Name: 8712 Operator: JC
un Time: 09/30/98 12:42:24
omment: M8954 R#0372
ode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	I-.0003	.2925	I-.0023	.0289	I.0005	11.73	I-.0000
SDev	.0001	.0095	.0124	.0003	.0001	.02	.0004
%RSD	21.28	3.244	531.3	1.141	14.14	.2021	55000.
#1	I-.0003	.3032	I-.0068	.0290	I.0004	11.75	I-.0002
#2	I-.0003	.2850	.0117	.0288	I.0004	11.70	I-.0005
#3	I-.0002	.2894	I-.0119	.0292	I.0006	11.74	I-.0002
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Low	IC Pass	IC Low
High	30.00	1400.	60.00	27.00	30.00	1400	15.00
Low	.0005	1000	.0100	.0050	.0010	.0500	.0010

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	I-.0005	.0049	I-.0041	.0846	1.898	.0206	3.358
SDev	.0014	.0006	.0002	.0031	.022	.0003	.038
%RSD	283.2	11.23	4.862	3.655	1.325	1.198	1.117
#1	I.0001	.0052	I-.0043	.0828	1.683	.0204	3.335
#2	I.0004	.0043	I-.0039	.0828	1.888	.0205	3.338
#3	I-.0021	.0052	I-.0042	.0882	1.724	.0208	3.401
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
High	30.00	60.00	60.00	400.0	30.00	8.000	1400.
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Elem	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	I.0027	.0024	10.67	I.0001	.0057	.0104	I.0034
SDev	.0002	.0024	.11	.0023	.0026	.0052	.0039
%RSD	8.303	97.24	.9867	1928.	45.09	50.17	113.8
#1	I.0028	I.0006	10.60	I.0024	.0059	.0145	I-.0011
#2	I.0027	I.0015	10.62	I-.0021	.0082	.0122	.0058
#3	I.0029	.0051	10.79	I.0000	.0031	.0045	.0052

Errors	IC Low	IC Pass	IC Pass	IC Low	NOCHECK	NOCHECK	IC Low
High	30.00	60.00	200.0	30.00			60.00
Low	.0020	.0020	.2000	.0050			.0010

000885

Elem	196071	196072	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.0051	.0151	.1282	I-.0011	.0067	I.0001	[illegible]

RSD	358.5	19.12	327.2	110.5	9272	19.25	17.26
1	-.0142	.0237	1.925	[-.0080	.0066	[.0031	.0116
2	.0217	.0107	[-.9361	.0142	.0067	[.0010	.0108
3	.0077	.0109	.3260	[-.0185	.0068	[.0031	.0040
r :	NOCHECK	NOCHECK	IC Pass	IC Low	IC Pass	IC Low	IC Pass
igh			50.00	60.00	220.0	50.00	30.00
ow			.0030	.0080	.0030	.0050	.0030

em	Se
nits	ppm
vge	.0171
Dev	.0023
RSD	13.39
1	.0111
2	.0117
3	.0101

rrors	IC Pass
igh	60.00
ow	.0040

IntStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
em	Y	--	--	--	--	--	--
avlen	360.083	--	--	--	--	--	--
vge	24855	--	--	--	--	--	--
Dev	112.2245	--	--	--	--	--	--
RSD	.4551732	--	--	--	--	--	--
1	24727	--	--	--	--	--	--
2	24713	--	--	--	--	--	--
3	24526	--	--	--	--	--	--

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thod: NOAESW Sample Name: 8716 Operator: JC
n Time: 09/30/98 12:47:31
mment: M8854 R#0372
de: CONC Corr Factor: 1

em	Ag	Al	As	Ba	Be	Ca	Cd
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	[-.0003	.2238	[-.0024	[.0045	[.0005	.1211	[.0000
Dev	.0001	.0101	.0129	.0001	.0001	.0017	.0005
RSD	24.84	4.515	539.1	1.221	11.88	1.384	3390.
1	[-.0002	.2355	[-.0053	[.0045	[.0004	.1222	[-.0001
2	[-.0004	.2182	.0117	[.0045	[.0005	.1220	[-.0004

3	[-.0002	.2177	[-.0136	[.0044	[.0004	.1192	[.0008
rrors	IC Low	IC Pass	IC Low	IC Low	IC Low	IC Pass	IC Low
igh	30.00	1400.	60.00	27.00	30.00	1400.	15.00
ow	.0005	1000	.0100	.0050	.0010	.0500	[illegible]

em	Co	Cr	Cu	Fe	K	Li	Mg

000886

Avge	1.0001	1.0006	1-.0023	.0297	.1170	1.0019	.0158
SDev	.0008	.0006	.0007	.0080	.0138	.0000	.0031
%RSD	223.2	96.11	30.12	26.76	11.81	1.013	19.11
#1	1.0000	1.0011	1-.0019	.0339	.1171	1.0019	.0141
#2	.0013	1.0007	1-.0031	.0252	.1307	1.0019	.0193
#3	1-.0002	1-.0000	1-.0020	.0250	.1030	1.0019	.0139
Errors	LC Low	LC Low	LC Low	LC Pass	LC Pass	LC Low	LC Pass
High	30.00	60.00	60.00	400.0	30.00	9.000	1400
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Item	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	1.0000	1-.0001	.9710	1.0000	.0022	.0020	.0061
SDev	.0002	.0018	.0182	.0010	.0031	.0055	.0028
%RSD	282.9	3265	1.876	3119.	141.0	282.9	165.1
#1	1-.0001	1-.0001	.9521	1.0009	-.0008	.0077	1-.0028
#2	1.0002	1.0017	.9885	1-.0011	.0053	-.0033	.0041
#3	1.0000	1-.0018	.9722	1.0003	.0021	.0014	.0141
Errors	LC Low	LC Low	LC Pass	LC Low	NOCHECK	NOCHECK	LC Pass
High	30.00	60.00	200.0	30.00			60.00
Low	.0030	.0020	.2000	.0050			.0040

Item	196071	196072	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.0016	.0135	1.887	1-.0032	1-.0002	.0058	1.0020
SDev	.0194	.0088	2.068	.0042	.0004	.0011	.0027
%RSD	1180	64.92	109.6	130.9	181.7	19.39	132.5
#1	-.0139	.0026	4.213	1-.0081	1-.0007	.0052	.0049
#2	.0195	.0168	1.191	1.0016	1.0000	.0052	1-.0001
#3	.0043	.0202	.2561	1-.0052	1-.0000	.0071	1.0018
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Low	LC Pass	LC Low
High			50.00	60.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0030

Item	Se
Units	ppm
Avge	.0099
SDev	.0118
%RSD	118.9
#1	1-.0036
#2	.0180
#3	.0152

Errors	LC Pass
High	60.00
Low	.0040

000887

AntStd	1	2	3	4	5	6	7

avlen	280.063	--	--	--	--	--	--
vge	21371	--	--	--	--	--	--
Dev	173.5002	--	--	--	--	--	--
RSD	.7119224	--	--	--	--	--	--
1	24247	--	--	--	--	--	--
2	24298	--	--	--	--	--	--
3	24589	--	--	--	--	--	--

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thod: NOAA kW Sample Name: CCV Operator: JC
n Time: 09/30/98 12:52:39
mment: M8954 R#0372
de: CONC Corr. Factor: 1

tem	Ag	Al	As	Ba	Be	Ca	Cd
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	1.012	Q8.916	1.006	.9936	1.007	9.778	.9948
Dev	.008	.110	.005	.0164	.006	.079	.0130
RSD	.7911	1.231	.5384	1.650	.5795	.8038	1.310
1	1.003	Q8.831	1.007	.9718	1.001	9.704	.9712
2	1.018	9.040	.9999	1.005	1.012	9.861	1.004
3	1.014	Q8.878	1.011	1.001	1.010	9.768	1.010
nnors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
alue	1.000	10.00	1.000	1.000	1.000	10.00	1.000
ange	10.00	10.00	10.00	10.00	10.00	10.00	10.00

tem	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	1.019	.9681	.9899	.9918	Q.0017	Q.0016	.9938
Dev	.014	.0122	.0116	.0207	.0109	.0001	.0125
RSD	1.363	1.261	1.173	2.082	631.2	4.151	1.262
1	1.008	.9680	.9765	.9680	Q.0042	Q.0016	.9914
2	1.018	.9558	.9971	1.003	Q-.0102	Q.0016	.9926
3	1.031	.9801	.9960	1.005	Q.0112	Q.0017	1.007
nnors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass
alue	1.000	1.000	1.000	1.000	10.00	10.00	1.000
ange	10.00	10.00	10.00	10.00	10.00	10.00	10.00

tem	Mn	Mo	Na	Ni	220371	220372	Sb
nits	ppm	ppm	ppm	ppm			ppm
vge	1.008	.9815	9.676	1.014	1.014	.9919	1.055
Dev	.013	.0181	.209	.019	.017	.0011	.011
RSD	1.289	1.811	2.161	1.861	1.648	.1112	1.079
1	1.002	.9839	9.431	.9919	.9945	.9941	1.043

1	.9970	.9818	9.803	1.026	1.025	.9911	1.069
3	1.025	.9857	9.791	1.023	1.022	.9962	1.088
nnors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK
alue	1.000	1.000	10.00	1.000			
ange	10.00	10.00	10.00	10.00			

nits			ppm	ppm	ppm	ppm	ppm
vge	.9921	.9860	Q1.120	.9421	.9933	1.005	1.001
Dev	.0053	.0292	1.875	.0219	.0059	.009	.006
RSD	.5397	2.960	132.1	2.645	.5948	.9259	.5977
1	.9768	.9648	Q-.0447	.9389	.9904	1.002	.9912
2	.9874	.9738	Q.7711	.9190	.9893	.9978	1.004
3	.9920	1.019	Q3.534	.9685	1.000	1.015	1.005
rrors	NOCHECK	NOCHECK	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
alue			1.000	1.000	1.000	1.000	1.000
ange			10.00	10.00	10.00	10.00	10.00

lem	Se
nits	ppm
vge	.9850
Dev	.0198
RSD	2.010
1	.9892
2	.9787
3	1.007
rrors	QC Pass
alue	1.000
ange	10.00

atStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
lem	Y	--	--	--	--	--	--
a	380.083	--	--	--	--	--	--
	24363	--	--	--	--	--	--
Dev	352.7837	--	--	--	--	--	--
RSD	1.448050	--	--	--	--	--	--
1	24757	--	--	--	--	--	--
2	24251	--	--	--	--	--	--
3	24077	--	--	--	--	--	--

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thod: NOALKW Sample Name: CCB Operator: JC
n Time: 09/30/98 12:57:47
mment: M8354 R#0372
de: CONC Corr. Factor: 1

lem	Ag	Al	As	Ba	Be	Ca	Cd
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	.0002	.0592	L-.0065	.0006	H.0011	-.0021	L-.0005
Dev	.0001	.0029	.0155	.0002	.0004	.0022	.0001
RSD	82.84	4.857	239.8	27.49	37.33	105.3	85.21

1	.0004	.0621	L-.0207	.0008	H.0015	-.0005	-.0000
2	.0001	.0564	L-.0087	.0006	H.0010	-.0015	L-.0007
3	.0002	.0591	H.0100	.0005	H.0007	-.0011	L-.0005
rrors	LC Pass	LC Pass	LC Low	LC Pass	LC High	LC Pass	LC Low

				Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.0008	I-.0036	.0089	-.0045	.0015	.0067
SDev	.0008	.0001	.0006	.0094	.0092	.0000	.0013
%RSD	229.1	14.11	17.39	105.6	206.5	1.028	81.45
#1	.0010	.00094	I-.0043	.0163	.0042	.0015	.0073
#2	-.0008	.0007	I-.0030	.0119	-.0143	.0015	H.0107
#3	.0007	.0007	I-.0036	-.0016	-.0034	.0016	.0021
Errors	IC Pass	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
High	.0010	.0010	.0010	.0200	.1000	.0050	.0080
Low	-.0010	-.0010	-.0010	-.0200	-.1000	-.0050	-.0080

Elem	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.0008	H.0035	.0052	.0005	.0048	.0025	H.0058
SDev	.0003	.0000	.0021	.0006	.0026	.0029	.0062
%RSD	32.45	.4615	39.36	124.3	52.81	120.3	108.8
#1	.0010	H.0035	.0070	.0002	.0046	.0038	.0007
#2	.0008	H.0035	.0057	.0011	.0024	-.0009	H.0126
#3	.0005	H.0035	.0030	.0000	.0075	.0045	H.0040
Errors	IC Pass	IC High	IC Pass	IC Pass	NOCHECK	NOCHECK	IC High
High	.0030	.0020	.2000	.0050			.0040
Low	-.0030	-.0020	-.2000	-.0050			-.0040

Elem	196071	196072	Sn	Ti	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.0184	.0104	2.068	.0001	.0007	-.0003	H.0032
SDev	.0097	.0147	1.346	.0102	.0007	.0012	.0022
%RSD	52.48	141.3	65.09	9565.	92.83	370.7	81.83
#1	.0073	.0149	1.218	H.0092	.0014	-.0010	H.0041
#2	.0230	.0224	3.620	I-.0109	.0007	-.0010	.0002
#3	.0249	-.0060	1.368	.0021	.0001	.0010	H.0055
Errors	NOCHECK	NOCHECK	NOCHECK	IC Pass	IC Pass	IC Pass	IC High
High				.0080	.0030	.0050	.0030
Low				-.0080	-.0030	-.0050	-.0030

Elem	Sc
Units	ppm
Avge	H.0134
SDev	.0092
%RSD	68.52

#1	H.0127
#2	H.0230
#3	H.0048
Errors	IC High
High	.0040
Low	-.0040

Elem	V	--	--	--	--	--	--
Wavlen	360.063	--	--	--	--	--	--
Avge	24358	--	--	--	--	--	--
SDev	110.8933	--	--	--	--	--	--
%RSD	.4544805	--	--	--	--	--	--
#	24280	--	--	--	--	--	--
#1	24305	--	--	--	--	--	--
#2	24483	--	--	--	--	--	--

Method: M0114W Sample Name: 84464-8677 Operator: JC
Run Time: 09/30/98 13:02:55
Comment: M8951 R#0372
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0001	.3540	L-.0027	.0457	L.0007	21.12	.0011
SDev	.0003	.0129	.0116	.0002	.0000	.16	.0008
%RSD	428.0	3.638	433.7	.4793	5.017	.7723	52.28
#1	L.0003	.3394	L-.0160	.0455	L.0008	20.98	L.0003
#2	L-.0003	.3592	L.0049	.0456	L.0007	21.28	.0017
#3	L-.0002	.3835	L.0031	.0459	L.0007	21.11	L.0008
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Low	IC Pass	IC Pass
High	30.00	1400.	60.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0007	.0066	L-.0026	.1203	2.568	.0237	1.717
SD	.0005	.0003	.0001	.0060	.052	.0001	.018
%RSD	78.83	5.274	4.027	5.018	2.011	1.870	1.058
#1	.0012	.0062	L-.0027	.1270	2.518	.0233	1.731
#2	L.0002	.0067	L-.0025	.1186	2.619	.0241	1.739
#3	L.0005	.0069	L-.0025	.1153	2.564	.0238	1.782
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
High	30.00	60.00	60.00	400.0	30.00	9.000	1400
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Elem	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.0051	.0030	15.97	L.0014	.0040	.0043	.0041
SDev	.0002	.0023	.17	.0005	.0033	.0010	.0047

%RSD	2.013	78.91	1.038	33.80	83.14	22.71	113.5
#1	.0056	.0051	15.85	L.0018	.0035	.0032	L.0021
#2	.0052	L.0005	18.18	L.0014	.0075	.0018	L.0008
#3	.0051	.0023	15.91	L.0008	.0009	.0049	.0095
Errors	IC Pass	IC Pass	IC Pass	IC Low	NOCHECK	NOCHECK	IC Pass
High	30.00	60.00	200.0	30.00			50.00

000891

			Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	- .0015	.0151	2.018	[-.0000	.0147	.0096	.0042
SDev	.0054	.0176	.666	.0154	.0001	.0001	.0013
%RSD	364.1	116.0	33.03	87720.	.8136	.8779	31.54
#1	-.0077	.0811	2.566	[-.0134	.0146	.0095	.0033
#2	.0010	-.0037	1.276	[-.0035	.0146	.0096	.0057
	.0023	.0180	2.211	.0168	.0148	.0097	.0036
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High			50.00	60.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0020

Elem	Se
Units	ppm
Avge	.0099
SDev	.0105
%RSD	105.9
#1	.0185
#2	[-.0018
#3	.0131
Errors	LC Pass
High	60.00
Low	.0040

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	360.073	--	--	--	--	--	--
Avg	23620	--	--	--	--	--	--
SD	187.4495	--	--	--	--	--	--
%RSD	.7936164	--	--	--	--	--	--
#1	23783	--	--	--	--	--	--
#2	23661	--	--	--	--	--	--
#3	23415	--	--	--	--	--	--

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thod: NOAIKW Sample Name: 8678 Operator: JC
n Time: 09/30/98 13:08:03
mment: M8954 R#0372
de: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	[-.0000	.1901	[.0078	.0313	[.0001	19.97	[-.0003
SDev	.0002	.0129	.0043	.0002	.0002	.11	.0003
%RSD	378.8	6.791	55.20	.6939	216.1	.5745	121.5
#1	[-.0001	.2041	[.0084	.0315	[.0002	19.95	[-.0005
#2	[-.0002	.1874	.0118	.0313	[.0002	19.73	[-.0002
#3	[.0002	.1787	[.0032	.0310	[-.0001	19.90	[.0001

000392

High	30.00	1400.	60.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	[-.0001	.0052	[-.0024	.0125	2.549	.0219	1.571
SD	.0007	.0005	.0004	.0118	.013	.0001	.031
%	567.4	9.193	17.35	94.54	.4929	.3272	1.972
#1	[-.0007	.0052	[-.0029	[.0037	2.543	.0219	1.603
#2	[.0006	.0057	[-.0022	[.0079	2.541	.0218	1.541
#3	[-.0003	.0047	[-.0021	.0260	2.564	.0220	1.569
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
High	30.00	60.00	60.00	400.0	30.00	9.000	1400.
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Elem	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	[.0002	[.0003	14.84	[.0008	.0077	.0086	[-.0025
SDev	.0001	.0019	.08	.0025	.0053	.0070	.0095
%RSD	60.74	738.7	.5701	299.1	68.48	81.36	372.9
#1	[.0002	[-.0013	14.80	[.0007	.0105	.0007	[-.0081
#2	[.0002	.0024	14.94	[-.0016	.0109	.0110	[-.0097
#3	[.0000	[-.0003	14.79	[.0034	.0016	.0141	.0074
Errors	IC Low	IC Low	IC Pass	IC Low	NOCHECK	NOCHECK	IC Low
High	30.00	60.00	200.0	30.00			60.00
Low	.0030	.0020	.2000	.0050			.0040

Elem	196071	196072	Sn	Ti	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	-.0001	.0063	.8119	[-.0066	.0132	.0087	.0083
SDev	.0127	.0041	1.750	.0017	.0005	.0024	.0038
%RSD	15600.	64.89	215.5	25.81	3.605	27.11	45.50
#1	.0101	.0097	.9723	[-.0080	.0138	.0074	.0040
#2	.0053	.0018	2.476	[-.0047	.0130	.0073	.0109
#3	-.0157	.0075	[-1.012	[-.0072	.0129	.0111	.0099
Errors	NOCHECK	NOCHECK	IC Pass	IC Low	IC Pass	IC Pass	IC Pass
High			50.00	60.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0020

Elem	Se
Units	ppm

Avge	.0045
SDev	.0052
%RSD	114.5
#1	.0102
#2	[.0033
#3	[.0001

High	[illegible]						
Low	.0040						

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Average	350.063	--	--	--	--	--	--
Ave	24032	--	--	--	--	--	--
SD	168.7812	--	--	--	--	--	--
%RSD	.7021863	--	--	--	--	--	--
#1	23838	--	--	--	--	--	--
#2	24118	--	--	--	--	--	--
#3	24143	--	--	--	--	--	--

Method: NOALKW Sample Name: 8679 Operator: JC
Run Time: 09/30/98 13:13:10
Comment: M8951 R#0372
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0001	.1936	1-.0029	.0275	1.0003	16.46	1-.0003
Dev	.0002	.0102	.0035	.0002	.0002	.08	.0004
%RSD	331.6	5.316	122.1	.8893	72.60	.4828	154.7
#1	1.0001	.1817	1-.0068	.0273	1.0005	16.43	1-.0001
#2	1-.0001	.1984	1-.0017	.0274	1.0003	16.41	1-.0007
#3	1.0002	.2005	1-.0001	.0277	1.0001	16.55	1.0001
Errors	LC Low	LC Pass	LC Low	LC Pass	LC Low	LC Pass	LC Low
High	30.00	1400.	60.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0003	.0052	1-.0024	1.0099	1.738	.0219	4.217
Dev	.0005	.0006	.0003	.0092	.022	.0001	.065
%RSD	154.1	11.41	12.36	93.12	1.252	.4629	1.540
#1	1.0007	.0054	1-.0026	.0172	1.718	.0218	4.151
#2	1-.0002	.0056	1-.0024	1-.0004	1.735	.0219	4.218
#3	1.0004	.0045	1-.0021	.0128	1.762	.0219	4.281
Errors	LC Low	LC Pass	LC Low	LC Low	LC Pass	LC Pass	LC Pass
High	30.00	60.00	60.00	100.0	30.00	9.000	1400.
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Elem	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	1.0000	1.0012	12.11	1-.0010	.0075	.0024	1.0028
Dev	.0000	.0034	.08	.0006	.0008	.0025	.0025
%RSD	15.21	286.5	.6427	85.28	11.11	72.30	88.11
#1	1.0000	.0050	12.17	1-.0017	.0080	.0053	1.0028
#2	1.0000	1-.0012	12.02	1-.0008	.0065	.0044	.0026

Errors	IC Low	IC Low	IC Pass	IC Low	NOCHECK	NOCHECK	IC Low
High	30.00	60.00	200.0	30.00			60.00
Low	.0030	.0020	.2000	.0050			.0040

Elem	196071	196072	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avg	.0084	.0082	1.612	1.0031	.0089	.0091	.0048
SD	.0052	.0124	.735	.0135	.0004	.0020	.0016
%RSD	61.24	150.2	45.59	432.3	4.883	22.17	33.49
#1	.0095	.0052	1.177	.0163	.0091	.0112	.0062
#2	.0022	.0218	2.461	1-.0108	.0086	.0081	.0051
#3	.0129	-.0023	1.199	1.0033	.0087	.0071	.0030

Errors	NOCHECK	NOCHECK	IC Pass	IC Low	IC Pass	IC Pass	IC Pass
High			50.00	60.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0020

Elem	Se
Units	ppm
Avge	.0086
SDev	.0065
%RSD	75.73
#1	.0069
#2	.0158
#3	1.0031

Errors	IC Pass
High	60.00
Low	.0040

Mode	1	2	3	4	5	6	7
Code	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	360.073	--	--	--	--	--	--
Avge	24625	--	--	--	--	--	--
SDev	80.10823	--	--	--	--	--	--
%RSD	.2440844	--	--	--	--	--	--
#1	24597	--	--	--	--	--	--
#2	24694	--	--	--	--	--	--
#3	24584	--	--	--	--	--	--

Method: NO1LKW Sample Name: 8680 Operator: JC
Run Time: 09/30/98 13:18:18
Comment: M8954 R#0377
Mode: NC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1-.0001	.2533	1.0015	.0424	1-.0000	21.13	[illegible]
SDev	.0008	.0132	.0051	.0002	.0002	.05	[illegible]

000395

#1	1-.0008	.2581	1.0015	.0423	1.0002	21.19	1-.0001
#2	1.0000	.2635	1.0066	.0426	1-.0001	21.09	1-.0007
#3	1.0003	.2382	1-.0036	.0422	1-.0002	21.13	1-.0006

Errors	IC Low	IC Pass	IC Low	IC Pass	IC Low	IC Pass	IC Low
High	30.00	1400.	60.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Item	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1-.0001	.0019	1-.0028	.0508	2.349	.0227	4.069
SDev	.0007	.0001	.0003	.0029	.035	.0003	.055
%RSD	857.7	7.443	9.223	5.759	1.497	1.110	1.358

#1	1-.0003	.0053	1-.0031	.0491	2.309	.0228	4.118
#2	1-.0007	.0045	1-.0027	.0512	2.373	.0228	4.083
#3	1.0008	.0019	1-.0026	.0491	2.388	.0224	4.008

Errors	IC Low	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
High	30.00	60.00	60.00	400.0	30.00	8.000	1400.
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Item	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	1.0006	1.0005	13.65	1.0012	.0030	.0107	.0080
SDev	.0001	.0009	.13	.0024	.0039	.0032	.0050
%RSD	15.42	171.9	.9407	196.0	129.9	29.88	61.72

#1	1.0005	1-.0004	13.72	1.0034	.0067	.0077	.0108
#2	1.0005	1.0014	13.72	1-.0013	.0032	.0102	.0110
#3	1.0007	1.0005	13.50	1.0016	-.0010	.0141	1.0023

Errors	IC Low	IC Low	IC Pass	IC Low	NOCHECK	NOCHECK	IC Pass
High	30.00	60.00	200.0	30.00			60.00
Low	.0020	.0020	.2000	.0050			.0040

Item	1960/1	1960/2	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	-.0098	.0100	3.416	1-.0109	.0093	.0111	.0081
SDev	.0145	.0148	.920	.0105	.0004	.0001	.0008
%RSD	147.9	147.6	26.70	96.25	4.683	.5108	10.53

#1	-.0190	.0055	3.759	1.0003	.0088	.0114	.0071
#2	.0069	-.0020	4.169	1-.0206	.0096	.0115	.0079
#3	-.0174	.0265	2.410	1-.0125	.0085	.0111	.0091

Errors	NOCHECK	NOCHECK	IC Pass	IC Low	IC Pass	IC Pass	IC Pass

High	50.00	60.00	220.0	50.00	30.00
Low	.0030	.0080	.0030	.0050	.0030

Item	Se
Units	ppm
Avge	1.0037
SDev	.0078
%RSD	208.0

=2	1.0013
=3	.0122

rrors	LC Low
igh	80.00
ow	.0010

n	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
lem	Y	--	--	--	--	--	--
avlen	360.063	--	--	--	--	--	--
Avge	24127	--	--	--	--	--	--
SDev	116.6719	--	--	--	--	--	--
%RSD	.4835674	--	--	--	--	--	--
=1	24227	--	--	--	--	--	--
=2	23999	--	--	--	--	--	--
=3	24156	--	--	--	--	--	--

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thod: N041KW Sample Name: 8681 Operator: JC
n Time: 09/30/98 13:23:25
mment: M8954 R#0372
de: CONC Corr. Factor: 1

lem	Ag	Al	As	Ba	Be	Ca	Cd
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1-.0002	.2280	1-.0014	.0414	1.0001	19.81	1-.0000
SDev	.0003	.0048	.0085	.0004	.0001	.05	.0005
%RSD	149.3	2.019	612.5	.9999	76.54	.2671	2891.
=1	1.0001	.2230	1-.0070	.0439	1.0002	19.84	1.0002
=2	1-.0002	.2289	1.0084	.0416	1.0000	19.84	1-.0005
=3	1-.0004	.2320	1-.0055	.0447	1.0002	19.75	1.0002
rrors	LC Low	LC Pass	LC Low	LC Pass	LC Low	LC Pass	LC Low
igh	30.00	1400.	60.00	27.00	30.00	1400.	15.00
ow	.0005	.1000	.0100	.0050	.0010	.0500	.0010

lem	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1-.0008	.0053	1-.0038	.0150	1.926	.0285	4.358
SDev	.0002	.0006	.0001	.0092	.031	.0005	.010
%RSD	28.09	11.53	3.912	61.88	1.607	1.953	.2271
=1	1-.0008	.0047	1-.0038	.0222	1.902	.0282	4.348
=2	1-.0010	.0059	1-.0038	1.0045	1.961	.0271	4.368
=3	1-.0010	.0055	1-.0039	.0181	1.917	.0283	4.360

rrors	LC Low	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
igh	30.00	80.00	60.00	400.0	30.00	9.000	1400.
ow	.0010	.0020	.0020	.0100	.1000	.0050	.0020

lem	Mn	Mo	Na	Ni	220371	220372	Sb
nits	ppm	ppm	ppm	ppm			
ode	1.0005	1.0005	12.21	1-.0004	.0013	.0052	[illegible]

	---	1.0005	12.30	1-.0006	-.0010	.0038	.0040
#2	1.0005	1-.0004	12.55	1-.0011	.0058	.0103	.0076
#3	1.0004	1.0015	12.37	1.0005	.0082	.0015	.0093
Errors	LC Low	LC Low	LC Pass	LC Low	NOCHECK	NOCHECK	LC Pass
High	30.00	80.00	200.0	30.00			80.00
Low	.0030	.0020	.2000	.0050			.0040

n	196071	196072	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.0081	.0241	2.159	1-.0002	.0057	.0094	.0049
SDev	.0112	.0184	.346	.0068	.0004	.0021	.0034
%RSD	138.6	76.28	16.03	3780.	7.443	22.67	70.32
#1	.0003	.0396	1.773	1.0029	.0054	.0072	1.0022
#2	.0031	.0289	2.443	1.0046	.0062	.0095	.0088
#3	.0209	.0038	2.260	1-.0080	.0055	.0115	.0037
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High			50.00	60.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0030

Elem	Se
Units	ppm
Avge	.0191
SDev	.0026
%RSD	15.05
#1	.0268
#2	.0207
#3	.0098
Errors	LC Pass
High	60.00
Low	.0040

ntStd	1	2	3	4	5	6	7
de	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
em	Y	--	--	--	--	--	--
avlen	260.083	--	--	--	--	--	--
ge	24017	--	--	--	--	--	--
ev	200.6897	--	--	--	--	--	--
SD	.8356034	--	--	--	--	--	--
	24241	--	--	--	--	--	--

	22852	--	--	--	--	--	--
	23058	--	--	--	--	--	--

d: NOAIKW Sample Name: 8682 Operator: JC
m 19/20/98 13:28:33
nt 3954 R=0272
CONC Corr. Factor: 1

	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	[-.0001	.2417	[.0049	.0291	[.0005	16.78	[-.0005
SDev	.0002	.0076	.0045	.0001	.0001	.07	.0005
%RSD	280.6	3.105	91.87	.3404	24.61	.4362	94.61
#1	[-.0001	.2524	[.0066	.0292	[.0004	16.70	[-.0005
#2	[-.0002	.2373*	[-.0002	.0290	[.0004	16.78	[-.0011
#3	[.0002	.2444	[.0083	.0290	[.0006	16.85	[-.0000
Errors	LC Low	LC Pass	LC Low	LC Pass	LC Low	LC Pass	LC Low
High	30.00	1400.	60.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010
Item	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	[-.0011	.0061	[-.0020	.0179	1.702	.0220	1.258
SDev	.0007	.0005	.0006	.0091	.015	.0001	.038
%RSD	65.70	7.853	19.84	50.75	.8918	.4560	.8991
#1	[-.0016	.0056	[-.0035	.0181	1.686	.0219	1.250
#2	[-.0003	.0063	[-.0023	[.0087	1.704	.0221	1.221
#3	[-.0013	.0065	[-.0031	.0268	1.716	.0221	1.287
Errors	LC Low	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	30.00	60.00	60.00	400.0	30.00	9.000	1400.
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0020
Item	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	[.0000	[.0012	12.12	[.0014	.0050	.0033	[.0018
SDev	.0000	.0027	.05	.0009	.0031	.0040	.0060
%RSD	12.91	231.0	.3779	65.51	61.79	120.3	331.8
#1	[.0000	[.0008	12.07	[.0014	.0015	.0071	.0078
#2	[.0000	.0042	12.15	[.0022	.0061	-.0008	[-.0015
#3	[.0000	[-.0012	12.14	[.0005	.0073	.0038	[.0023
Errors	LC Low	LC Low	LC Pass	LC Low	NOCHECK	NOCHECK	LC Low
High	30.00	60.00	200.0	30.00			60.00
Low	.0030	.0020	.2000	.0050			.0040
Item	1980/1	1980/2	Sn	Ti	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.0053	.0017	3.455	[.0003	.0096	.0100	.0039
SDev	.0048	.0086	.350	.0085	.0001	.0024	.0021
%RSD	90.31	497.9	10.14	2477.	.6408	23.95	54.49
#1	.0032	-.0000	3.276	[.0050	.0096	.0115	.0052

#2	.0107	.0111	3.229	[-.0095	.0095	.0114	[.0014
#3	.0019	-.0059	3.859	[.0055	.0095	.0073	.0050
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High			50.00	60.00	220.0	50.00	30.00
Low			.0030	.0080	.0020	.0050	.0030

Dev	.0073
RSD	225.6
1	1.0014
2	.0113
3	1-.0030

n	LC Low
igh	60.00
ow	.0040

ntStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
lem	)	--	--	--	--	--	--
xylen	380.063	--	--	--	--	--	--
vge	24171	--	--	--	--	--	--
Dev	158.4498	--	--	--	--	--	--
RSD	.6588865	--	--	--	--	--	--
1	23941	--	--	--	--	--	--
2	24218	--	--	--	--	--	--
3	24171	--	--	--	--	--	--

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thod: NOAIKW Sample Name: 84171-8697 Operator: JC
n Time: 09/30/98 13:32:41
mment: M8954 R#0372
de: CONC Corr. Factor: 1

lem	Ag	Al	As	Ba	Be	Ca	Cd
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	1-.0002	.3445	1-.0055	.0906	1-.0003	92.26	1.0002
Dr	.0002	.0087	.0075	.0008	.0001	.35	.0002
R	103.6	1.942	136.3	.8779	25.43	.3771	90.49
1	1-.0000	.3375	1-.0142	.0898	1-.0003	91.87	1.0004
2	1-.0002	.3452	1-.0020	.0904	1-.0003	92.51	1.0000
3	1-.0005	.3508	1-.0004	.0911	1-.0002	92.41	1.0002
nrons	LC Low	LC Pass	LC Low	LC Pass	LC Low	LC Pass	LC Low
igh	30.00	1400.	60.00	27.00	30.00	1400.	15.00
ow	.0005	.1000	.0100	.0050	.0010	.0500	.0010

lem	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	1.0001	.0050	1-.0045	.0204	17.91	.0287	21.91
Dev	.0002	.0002	.0010	.0096	.24	.0003	.18
RSD	161.7	3.835	22.11	46.89	1.341	1.323	.7111

1	1.0003	.0052	1-.0042	.0279	17.78	.0288	22.09
2	1.0003	.0050	1-.0037	1.0096	17.77	.0285	21.72
3	1-.0001	.0048	1-.0058	.0238	18.19	.0271	21.91
nrons	LC Low	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
igh	30.00	80.00	80.00	100.0	30.00	9.000	1400.
ow	.0010	.0020	.0020	.0100	.1000	.0050	

nits	ppm	ppm	ppm	ppm			ppm
vge	1.0008	1.0001	89.69	1.0014	.0010	.0021	1.0040
Dev	.0001	.0005	1.08	.0008	.0051	.0047	.0069
RSD	11.61	610.3	1.208	60.57	517.7	225.1	173.7
=1	1.0009	1-.0005	89.89	1.0011	-.0018	.0039	.0109
=2	1.0008	1.0004	88.53	1.0007	-.0021	.0056	1-.0030
=3	1.0011	1.0004	90.66	1.0023	.0069	-.0033	.0041
rrors	LC Low	LC Low	LC Pass	LC Low	NOCHECK	NOCHECK	LC Low
igh	30.00	60.00	200.0	30.00			60.00
ow	.0030	.0020	.2000	.0050			.0040

lem	1960/1	1960/2	Sn	Tl	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vge	.0147	.0040	2.538	1.0054	1.0007	.0187	1.0017
Dev	.0040	.0091	1.062	.0118	.0000	.0012	.0015
RSD	27.17	224.3	41.81	217.8	2.258	6.258	85.11
=1	.0173	-.0038	1.452	.0125	1.0007	.0178	1.0020
=2	.0101	.0020	3.574	1-.0082	1.0007	.0200	.0030
=3	.0168	.0140	2.589	.0119	1.0007	.0181	1.0001
rrors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Low	LC Pass	LC Low
igh			50.00	60.00	220.0	50.00	30.00
ow			.0030	.0080	.0030	.0050	.0030

lem	Se
nits	ppm
vge	.0078
Dev	.0064
RSD	80.17
=1	1.0035
=2	.0050
=3	.0153
rrors	LC Pass
igh	60.00
ow	.0040

ntStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
lem	Y	--	--	--	--	--	--
avlen	360.073	--	--	--	--	--	--
vge	23705	--	--	--	--	--	--

Dev	192.1952	--	--	--	--	--	--
RSD	.8107792	--	--	--	--	--	--
1	23850	--	--	--	--	--	--
2	23773	--	--	--	--	--	--
3	23487	--	--	--	--	--	--

ode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0001	.2095	1-.0008	1.0039	1.0003	.1417	1-.0002
SDev	.0003	.0016	.0094	.0001	.0001	.0068	.0002
%RSD	119.8	.7879	1211.	3.053	42.38	4.835	128.1
=1	1-.0002	.2079	1-.0070	1.0038	1.0003	.1477	1-.0003
=2	1.0001	.2112	1-.0053	1.0038	1.0005	.1427	1.0001
=3	1.0003	.2095	.0100	1.0040	1.0002	.1347	1-.0004
Errors	IC Low	IC Pass	IC Low	IC Low	IC Low	IC Pass	IC Low
High	30.00	1400.	60.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1-.0006	1.0009	1-.0038	.0195	.1147	1.0019	.0205
SDev	.0003	.0005	.0004	.0181	.0103	.0000	.0027
%RSD	52.42	54.59	11.65	92.91	9.006	1.278	13.19
=1	1-.0003	1.0015	1-.0038	.0298	.1030	1.0019	.0175
=2	1-.0008	1.0005	1-.0042	1-.0014	.1185	1.0018	.0228
=3	1-.0006	1.0007	1-.0033	.0300	.1226	1.0019	.0211
Errors	IC Low	IC Low	IC Low	IC Pass	IC Pass	IC Low	IC Pass
High	30.00	60.00	60.00	400.0	30.00	9.000	1400
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Elem	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avg	1.0001	1.0005	.8744	1-.0007	.0053	.0051	.0075
SD	.0001	.0023	.0116	.0006	.0036	.0060	.0068
%RSD	61.22	419.1	1.326	79.51	67.21	117.1	91.42
1	1.0000	1-.0019	.8768	1-.0006	.0039	.0116	.0075
2	1.0002	1.0008	.8618	1-.0013	.0094	.0038	1.0007
3	1.0002	.0026	.8847	1-.0002	.0027	-.0001	.0144
Errors	IC Low	IC Low	IC Pass	IC Low	NOCHECK	NOCHECK	IC Pass
High	30.00	60.00	200.0	30.00			60.00
Low	.0030	.0020	.2000	.0050			.0040

Elem	1960/1	1960/2	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.0000	.0029	1.777	1-.0145	1.0000	.0052	.0052

Dev	.0129	.0218	1.817	.0114	.0008	.0000	.0041
%RSD	209.8	733.5	92.70	78.68	2988	.1783	79.88
1	-.0087	.0082	3.679	1-.0035	1.0007	.0052	.0081
2	.0299	-.0211	.7863	1-.0262	1.0000	.0052	.0057
3	.0037	.0207	.8660	1-.0138	1-.0006	.0052	1.0008

000902

Errors	NOCHECK	NOCHECK	IC Pass	IC Low	IC Low	IC Pass	IC Pass

			.0030		.0030

Elem	Se
Units	ppm
Avge	.0053
SDev	.0096
%RSD	181.7
#1	.0043
#2	-.0038
#3	.0154
Errors	IC Pass
High	80.00
Low	.0010

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	360.063	--	--	--	--	--	--
Avge	24238	--	--	--	--	--	--
SDev	37.98684	--	--	--	--	--	--
%RSD	.1567243	--	--	--	--	--	--
#1	24272	--	--	--	--	--	--
#2	24245	--	--	--	--	--	--
#3	24197	--	--	--	--	--	--

Method: NOAHKW Sample Name: 84488-8731 Operator: JC
Run Time: 09/30/98 13:43:56
Comment: M8954 R#0372
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	.2434	-.0148	.0964	-.0008	115.2	.0005
SDev	.0003	.0149	.0136	.0010	.0001	.9	.0001
%RSD	168.8	6.101	91.75	1.072	16.29	.7617	27.77
#1	-.0001	.2258	-.0152	.0953	-.0007	115.8	.0005
#2	-.0005	.2491	-.0010	.0967	-.0008	114.2	.0007
#3	.0001	.2546	-.0283	.0973	-.0010	115.6	.0004
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Low	IC Pass	IC Low
High	30.00	1400.	60.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010
Elem	Co	Cr	Cu	Fe	K	Li	Mg

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Ag	-.0001	.0070	-.0033	.0084	3.958	.0122	18.01
Avge	.0005	.0008	.0008	.0073	.085	.0007	[illegible]
%RSD	134.5	7.738	17.42	112.9	1.837	1.811	1000
#1	-.0002	.0089	-.0032	-.0014	3.918	.0119	18.[illegible]
#2	.0007	.0088	-.0039	.0129	4.033	.0121	18.[illegible]
#3	.0007	.0077	-.0027	.0079	3.921	.0122	17.[illegible]

000903

igh	30.00	60.00	60.00	400.0	30.00	9.000	1400.
ow	.0010	.0020	.0020	.0100	.1000	.0050	.0080

lem	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
nits	ppm	ppm	ppm	ppm			ppm
vge	.3467	.0065	193.6	.1851	.0011	.0109	!.0003
Dev	.0018	.00064	1.7	.0011	.0020	.0060	.0092
%!	1.374	8.624	.8793	.5908	181.6	54.72	3441.
=1	.3418	.0067	195.3	.1839	.0030	.0124	!-.0009
=2	.3511	.0069	193.8	.1860	-.0010	.0042	!-.0083
=3	.3471	.0059	191.9	.1854	.0014	.0180	.0100
rrors	IC Pass	IC Pass	IC Pass	IC Pass	NOCHECK	NOCHECK	IC Low
igh	30.00	60.00	200.0	30.00			60.00
ow	.0020	.0020	.2000	.0050			.0040

lem	1960/1	1960/2	Sn	Ti	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vge	.0010	.0081	1.801	!-.0141	!.0001	.6158	.0078
Dev	.0114	.0149	.830	.0219	.0007	.0100	.0045
%SD	284.8	245.7	18.04	152.1	483.6	1.627	58.95
=1	.0162	-.0055	5.486	!-.0154	!.0009	.6059	.0093
=2	.0024	.0008	3.839	!-.0358	!-.0006	.6259	!.0026
=3	-.0065	.0229	4.477	!.0080	!.0001	.6156	.0111
rrors	NOCHECK	NOCHECK	IC Pass	IC Low	IC Low	IC Pass	IC Pass
igh			50.00	60.00	220.0	50.00	30.00
ow			.0030	.0080	.0030	.0050	.0030

lem	Se
nit	ppm
v	.0057
Dev	.0067
SD	116.6
=1	!.0021
=2	!.0017
=3	.0135
rrors	IC Pass
igh	60.00
ow	.0040

ntStd	1	2	3	4	5	6	7

ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
lem	Y	--	--	--	--	--	--
vg	280.083	--	--	--	--	--	--
Dev	22770	--	--	--	--	--	--
SD	219.2070	--	--	--	--	--	--
	1.091218	--	--	--	--	--	--
	28000	--	--	--	--	--	--

Method: NOAIKW Sample Name: 84121-8548 Operator: JC
Run Time: 09/30/98 13:49:05
Comment: M8054 R#0372
Mode: CONC Corr. Factor: 1

El	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1-.0003	.2079	1.0041	.0206	1.0003	36.14	1-.0001
SDev	.0001	.0140	.0109	.0001	.0004	.30	.0003
%RSD	18.97	6.712	264.4	.6234	143.2	.8404	296.1
#1	1-.0004	.2078	1-.0037	.0204	1.0004	36.13	1.0001
#2	1-.0004	.1941	.0166	.0206	1.0005	35.85	1-.0005
#3	1-.0002	.2220	1-.0005	.0207	1-.0002	36.45	1.0000
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Low	IC Pass	IC Low
High	30.00	1400.	60.00	27.00	30.00	1400	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0002	.0030	1-.0018	.2913	6.148	.0054	20.40
SDev	.0008	.0006	.0003	.0148	.086	.0001	.12
%RSD	388.8	19.17	14.28	5.071	1.068	.9001	.5815
#1	1-.0006	.0023	1-.0020	.3083	6.198	.0054	20.47
#2	1.0001	.0034	1-.0015	.2841	6.074	.0053	20.27
#3	1.0008	.0031	1-.0020	.2816	6.170	.0054	20.47
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
High	30.00	60.00	60.00	400.0	30.00	9.000	1400.
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Elem	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.1251	.0272	20.53	1-.0001	.0060	-.0019	1.0010
SDev	.0016	.0013	.19	.0024	.0029	.0067	.0103
%RSD	1.308	4.832	.9345	3892.	47.91	350.6	1050.
#1	.1262	.0280	20.44	1-.0015	.0052	-.0095	1-.0109
#2	.1232	.0278	20.40	1.0027	.0038	.0007	.0077
#3	.1258	.0257	20.75	1-.0013	.0092	.0031	.0082
Errors	IC Pass	IC Pass	IC Pass	IC Low	NOCHECK	NOCHECK	IC Low
High	30.00	60.00	200.0	30.00			80.00
Low	.0030	.0020	.2000	.0050			.0040

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Elem	198071	198072	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.0108	.0005	1.282	1-.0080	1.0004	.0113	1.0007
SDev	.0060	.0182	2.593	.0201	.0000	.0005	.0013
%RSD	55.37	3334.	202.3	223.4	2.378	1.181	[illegible]
#1	.0057	.0168	1-.3271	1-.0285	1.0004	.0117	1-.0018

000905

rrors	NOCHECK	NOCHECK	IC Pass	IC Low	IC Low	IC Pass	IC Low
igh			50.00	80.00	220.0	50.00	30.00
ow			.0030	.0080	.0030	.0050	.0030

lem	Se
n	ppm
v	.0043
Dev	.0120
RSD	279.0
1	.0134
2	-.0093
3	.0087

rrors	IC Pass
igh	60.00
ow	.0040

ntStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
lem	Y	--	--	--	--	--	--
avlen	380.063	--	--	--	--	--	--
ge	24253	--	--	--	--	--	--
Dev	278.4477	--	--	--	--	--	--
RSD	1.152219	--	--	--	--	--	--
1	24234	--	--	--	--	--	--
2	24182	--	--	--	--	--	--
3	23442	--	--	--	--	--	--

lysis Report QC Standard Wed 09-30-98 02:10:40 PM page 1

hod: NOALKW Sample Name: CCV Operator: JC
Time: 09/30/98 14:05:40
me M8951 R#0372
NC Corr. factor: 1

em	Ag	Al	As	Ba	Be	Ca	Cd
its	ppm	ppm	ppm	ppm	ppm	ppm	ppm
ge	.9920	9.378	.9897	.9903	1.036	10.03	[illegible]
ev	.0012	.118	.0039	.0172	.006	.12	.0040

000906

1	.9922	9.543	.9919	.9829	1.043	10.16	.9926
2	.9893	9.328	.9852	.9838	1.034	9.997	.9874
3	.9875	9.258	.9921	1.004	1.031	9.941	.9952
rrors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
alue	1.000	10.00	1.000	1.000	1.000	10.00	1.000
a	10.00	10.00	10.00	10.00	10.00	10.00	10.00

lem	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	.9939	.9939	.9817	.9869	Q.0049	Q.0016	1.002
Dev	.0125	.0040	.0053	.0124	.0015	.0000	.005
RSD	1.255	.4108	.5371	1.245	30.38	1.884	.4871
1	.9869	.9815	.9765	.9834	Q.0061	Q.0016	.9995
2	.9865	.9817	.9815	.9995	Q.0054	Q.0017	.9991
3	1.008	.9886	.9870	1.008	Q.0032	Q.0017	1.007
rrors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass
alue	1.000	1.000	1.000	1.000	10.00	10.00	1.000
ange	10.00	10.00	10.00	10.00	10.00	10.00	10.00

lem	Mn	Mo	Na	Ni	220371	220372	Sb
nits	ppm	ppm	ppm	ppm			ppm
vge	1.004	.9782	9.561	.9934	.9755	.9633	1.016
Dev	.010	.0046	.194	.0028	.0191	.0171	.011
RSD	1.036	.4721	2.024	.2800	1.960	1.775	1.045
1	.9961	.9824	9.389	.9915	.9559	.9723	1.009
2	.9991	.9769	9.523	.9922	.9762	.9436	1.028
3	1.015	.9744	9.771	.9968	.9942	.9741	1.012
rrors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK
alue	1.000	1.000	10.00	1.000			
ange	10.00	10.00	10.00	10.00			

lem	1980/1	1980/2	Sn	Ti	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vge	.9788	.9761	Q2.138	.9575	.9952	1.021	.9874
Dev	.0381	.0201	1.104	.0196	.0050	.009	.0132
RSD	3.891	2.058	51.62	2.042	.5012	.8703	1.350
1	.9426	.9886	Q2.356	.9706	.9920	1.020	.9888
2	1.018	.9529	Q3.117	.9669	.9926	1.013	.9545
3	.9748	.9867	.9420	.9351	1.001	1.031	.9808
rrors	NOCHECK	NOCHECK	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass

alue		1.000	1.000	1.000	1.000	1.000
an		10.00	10.00	10.00	10.00	10.00

lem	Se
nits	ppm
vge	.9773
Dev	.0051
RSD	.5220

=2	.9751
=3	.9831

Errors	QC Pass
Value	1.000
Range	10.00

Tr 1	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Maxlen	360.063	--	--	--	--	--	--
Avge	21788	--	--	--	--	--	--
SDev	308.8110	--	--	--	--	--	--
%RSD	1.237017	--	--	--	--	--	--
=1	25011	--	--	--	--	--	--
=2	21872	--	--	--	--	--	--
=3	21118	--	--	--	--	--	--

Method: NOAIKW Sample Name: CCB Operator: JC
Run Time: 09/30/98 14:10:49
Comment: M8954 R#0372
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	.0022	-.0032	.0006	H.0010	.0074	H.0008
SDev	.0005	.0043	.0202	.0002	.0003	.0038	.0004
%RSD	195.1	193.8	622.6	32.42	33.37	51.47	54.31
=1	H.0007	.0068	L-.0064	.0008	H.0014	.0111	H.0011
=2	.0002	-.0017	L-.0217	.0005	H.0008	.0076	H.0008
=3	-.0002	.0016	H.0184	.0005	H.0008	.0025	H.0003
Errors	IC Pass	IC Pass	IC Pass	IC Pass	IC High	IC Pass	IC High
High	.0007	.1000	.0040	.0020	.0002	.1000	.0002
Low	-.0007	-.1000	-.0040	-.0020	-.0002	-.1000	-.0003

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0005	.0003	L-.0015	.0055	-.0041	.0015	.0037
SDev	.0005	.0003	.0001	.0092	.0054	.0000	.0017
%RSD	105.3	106.6	7.834	167.1	130.8	.9823	45.58
=1	-.0001	-.0000	L-.0014	.0025	.0018	.0015	.0038
=2	.0008	.0003	L-.0015	-.0018	-.0053	.0015	.0020
=3	.0007	.0005	L-.0016	.0158	-.0088	.0015	.0054

Errors	IC Pass	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
High	.0010	.0010	.0010	.0200	.1000	.0050	.0080
Low	-.0010	-.0010	-.0010	-.0200	-.1000	-.0050	-.0080

Elem	Mn	Mo	Na	Ni	220371	220372
Units	ppm	ppm	ppm	ppm		
Avge	.0008	-.0001	.0078	.0003	.0028	.0018

000908

=1	.0008	H.0025	.0097	.0018	-.0026	.0103	.0022
=2	.0005	- 0018	0071	-.0012	.0102	-.0018	H.0072
=3	.0006	-.0018	.0064	.0005	.0007	.0059	H.0056
rrors	IC Pass	IC Pass	IC Pass	IC Pass	NOCHECK	NOCHECK	IC High
1	.0030	.0020	.2000	.0050			.0040
o	-.0030	-.0020	-.2000	-.0050			-.0040
lem	186071	186072	Sn	Tl	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vge	.0197	.0018	1.047	.0023	.0009	.0003	H.0041
Dev	.0182	.0020	.374	.0056	.0004	.0011	.0019
RSD	82.20	115.0	35.70	243.8	45.51	345.7	45.75
1	.0205	.0028	.8192	H.0086	.0013	.0010	H.0060
2	.0031	.0031	1.213	.0005	.0006	.0010	.0022
3	.0354	-.0008	1.310	-.0021	.0006	-.0010	H.0042
rrors	NOCHECK	NOCHECK	NOCHECK	IC Pass	IC Pass	IC Pass	IC High
igh				.0080	.0030	.0050	.0020
ow				-.0080	-.0030	-.0050	- .0030

lem	Se
nits	ppm
vge	H.0081
Dev	.0043
RSD	52.71
1	H.0090
2	.0034
3	H.0117
rrors	IC High
igh	.0040
ow	-.0040

ntStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
lem	Y	--	--	--	--	--	--
avlen	380.063	--	--	--	--	--	--
vge	24971	--	--	--	--	--	--
Dev	221.8578	--	--	--	--	--	--
RSD	.0288058	--	--	--	--	--	--
1	25237	--	--	--	--	--	--

2	24888	--	--	--	--	--
3	24809	--	--	--	--	--

R#0372C
9/30/98

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thod: N04KW Sample Name: 84425-8556 Operator: JC
n Time: 09/30/98 14:15:57
mment: M8854 R#0372
de: CONC Corr. Factor: 1

lem	Ag	Al	As	Ba	Be	Ca	Cd
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	L-.0000	.2505	L-.0020	.0871	L-.0001	57.30	L.0001
	.0002	.0102	.0147	.0004	.0001	.57	.0001
SD	1330.	4.066	750.4	.4254	276.4	.9977	518.9
	L-.0002	.2622	L-.0158	.0875	L-.0001	57.46	L.0005
	L-.0001	.2441	.0135	.0867	L.0001	56.86	L.0001
	L.0002	.2451	L-.0036	.0871	L-.0002	57.77	L-.0004
ors	LC Low	LC Pass	LC Low	LC Pass	LC Low	LC Pass	LC Low
gh	30.00	1400.	60.00	27.00	30.00	1400.	15.00
	.0005	.1000	.0100	.0050	.0010	.0500	.0010

m	Co	Cr	Cu	Fe	K	Li	Mg
ts	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	L.0000	.0042	L-.0004	1.317	1.840	L.0032	18.21
	.0006	.0002	.0001	.014	.031	.0000	.09
	39890	3.883	16.82	1.043	1.885	.8838	[illegible]
	L-.0002	.0042	L-.0003	1.324	1.854	L.0032	18.24
	L.0006	.0045	L-.0004	1.331	1.882	L.0032	18.11
	L-.0002	.0042	L-.0004	1.325	1.805	L.0032	18.29
rs	LC Low	LC Pass	LC Low	LC Pass	LC Pass	LC Low	LC Pass
	30.00	80.00	60.00	400.0	30.00	8.000	1400.
	.0010	.0020	.0020	.0100	.1000	.0050	.0080

		Mo	Na	Ni	220371	220372	Sb
	m	ppm	ppm	ppm			ppm
	.1281	L.0012	5.771	L.0011	.0022	.0038	L.0040
	.0007	.0028	.058	.0010	.0047	.0032	.0079

000910

=1	.1269	.0027	5.788	1.0023	[illegible]	[illegible]	[illegible]
=2	.1258	.0027	5.820	1.0007	.0018	.0070	.0057
=3	.1255	1-.0018	5.706	1.0005	- .0024	.0007	1-.0046
ppms	LC Pass	LC Low	LC Pass	LC Low	NOCHECK	NOCHECK	LC Low
High	30.00	60.00	200.0	30.00			60.00
Low	.0030	.0020	.2000	.0050			.0040
Item	198071	198072	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.0181	.0125	1.821	1.0075	1.0003	.2840	.0033
SDev	.0133	.0171	.481	.0080	.0001	.0019	.0032
%RSD	72.62	139.1	26.39	106.5	135.3	.6716	95.78
=1	.0212	.0311	1.623	.0167	1.0001	.2856	.0049

=2	.0301	- .0031	1.470	1.0017	1.0001	.2845	.0053
=3	.0029	.0099	2.368	1.0042	1.0007	.2819	1-.0007
ppms	NOCHECK	NOCHECK	LC Pass	LC Low	LC Low	LC Pass	LC Pass
High			50.00	80.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0020
Item	Se						

000911

nits	ppm	ppm	ppm	ppm			ppm
vge	.0098	.0024	3.176	1.0017	.0012	.0080	.0080
Dev	.0003	.0010	.052	.0022	.0041	.0027	.0078
RSD	2.896	42.84	1.632	128.4	339.3	30.55	98.60
1	.0096	.0030	3.233	1.0009	.0048	.0061	.0125
2	.0094	.0030	3.133	1.0042	-.0032	.0116	.0125
3	.0099	1.0012	3.161	1.0000	.0020	.0093	1-.0011
rrors	IC Pass	IC Pass	IC Pass	IC Low	NOCHECK	NOCHECK	IC Pass
igh	30.00	60.00	200.0	30.00			60.00
ow	.0030	.0020	.2000	.0050			.0040

lem	196071	196072	Sn	Tl	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vge	.0000	.0288	1.549	1-.0007	.0041	1.277	.0061
Dev	.0072	.0094	.972	.0114	.0000	.008	.0008
RSD	37340	32.58	62.71	1572.	.1023	.6531	8.941
1	-.0080	.0241	2.475	1-.0132	.0041	1.283	.0057
2	.0008	.0225	.5376	1.0018	.0041	1.267	.0067
3	.0075	.0398	1.633	.0092	.0041	1.279	.0063
rrors	NOCHECK	NOCHECK	IC Pass	IC Low	IC Pass	IC Pass	IC Pass
igh			50.00	80.00	220.0	50.00	30.00
ow			.0030	.0080	.0030	.0050	.0030

lem	Se
nits	ppm
vge	.0186
Dev	.0084
RSD	43.04
1	.0139
2	.0155
3	.0292
rrors	IC Pass
igh	60.00
ow	.0040

atStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
lem	Y	--	--	--	--	--	--
avlen	380.062	--	--	--	--	--	--
vge	24374	--	--	--	--	--	--

Dev	43.10507	--	--	--	--	--	--
RSD	.1720791	--	--	--	--	--	--
1	24402	--	--	--	--	--	--
2	24388	--	--	--	--	--	--
3	24321	--	--	--	--	--	--

heck: NO1KW Sample Name: 8558 Operator: JC

ode: CONC Corr. Factor: 1

Item	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0002	.3371	1-.0026	.1042	1.0000	94.49	1.0004
SDev	.0003	.0155	.0081	.0009	.0001	.24	.0003
%RSD	170.8	4.831	305.7	.8226	941.5	.2529	79.29
#1	1.0004	.3330	1-.0055	.1042	1.0000	94.67	1.0005
#2	1-.0001	.3229	1-.0089	.1033	1.0000	94.22	1.0006
#3	1.0002	.3543	1.0065	.1050	1-.0001	94.58	1.0000
Errors	LC Low	LC Pass	LC Low	LC Pass	LC Low	LC Pass	LC Low
High	30.00	1400.	60.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Item	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1-.0002	.0099	.0379	2.471	1.728	1.0050	37.49
SDev	.0012	.0009	.0003	.029	.025	.0000	.26
%RSD	540.2	8.955	.9025	1.173	1.428	.8546	.6813
#1	1.0008	.0093	.0377	2.487	1.706	1.0050	37.41
#2	1-.0016	.0095	.0376	2.438	1.723	1.0050	37.30
#3	1.0002	.0109	.0382	2.488	1.755	.0050	37.72
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Low	LC Pass
High	30.00	60.00	60.00	400.0	30.00	9.000	1400.
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Item	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.0245	1-.0021	14.41	.0059	.0073	.0160	.0069
SDev	.0004	.0021	.26	.0013	.0009	.0092	.0010
%RSD	1.848	100.1	1.828	21.58	11.85	57.23	14.42
#1	.0246	1.0003	14.21	.0054	.0071	.0086	.0057
#2	.0240	1-.0033	14.38	.0071	.0082	.0132	.0071
#3	.0248	1-.0033	14.73	1.0050	.0065	.0263	.0075
Errors	LC Pass	LC Low	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass
High	30.00	60.00	200.0	30.00			60.00
Low	.0030	.0020	.2000	.0050			.0040

Item	1960/1	1960/2	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.0197	.0055	1.867	1-.0080	.0077	2.177	.0131

SDev	.0111	.0107	1.244	.0085	.0004	.016	.0060
%RSD	56.24	195.3	66.60	140.1	5.320	.7508	45.47
#1	.0321	-.0018	2.455	1-.0118	.0082	2.177	.0081
#2	.0165	.0018	2.708	1.0037	.0071	2.161	.0118
#3	.0108	.0165	.4328	1-.0100	.0075	2.193	.0181
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Pass	LC Pass	LC Pass

000914

errors	IC Pass	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC High
High	.0010	.0010	.0010	.0200	.1000	.0050	.0080
Low	-.0010	-.0010	-.0010	-.0200	-.1000	-.0050	-.0080

Elem	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avg	.0000	-.0006	H.7142	.0008	.0066	.0055	H.0061
Std	.0000	.0036	.0116	.0003	.0044	.0049	.0019
%RSD	38.24	574.3	1.628	31.60	66.31	87.99	31.23
#1	.0000	H.0034	H.7228	.0009	.0016	.0005	H.0072
#2	.0000	L-.0035	H.7191	.0009	.0087	.0102	H.0071
#3	.0000	-.0018	H.7009	.0005	.0095	.0058	.0038

errors	IC Pass	IC Pass	IC High	IC Pass	NOCHECK	NOCHECK	IC High
High	.0030	.0020	.2000	.0050			.0040
Low	-.0030	-.0020	-.2000	-.0050			-.0040

Elem	1980/1	1980/2	Sn	Ti	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	-.0053	.0059	-.7677	L-.0084	.0002	H.0082	H.0058
Stdev	.0054	.0176	.9769	.0084	.0003	.0023	.0045
%RSD	102.1	299.4	127.2	99.90	172.5	28.18	77.95
#1	-.0066	.0249	.3405	.0010	.0000	H.0109	.0009
#2	.0097	.0027	-1.504	L-.0152	.0006	H.0069	H.0097
#3	-.0099	-.0099	-1.140	L-.0110	-.0000	H.0069	H.0070

errors	NOCHECK	NOCHECK	NOCHECK	IC Low	IC Pass	IC High	IC High
High				.0080	.0030	.0050	.0030
Low				-.0080	-.0020	-.0050	-.0030

Elem	Se
Units	ppm
Avge	.0025
Stdev	.0122
%RSD	488.3
#1	H.0147
#2	.0023
#3	L-.0098

errors	IC Pass
High	.0040
Low	-.0040

ntSta	1	2	3	4	5	6	7

Code	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
#1	N	--	--	--	--	--	
Avg	380.083	--	--	--	--	--	--
Avge	25222	--	--	--	--	--	--
Stdev	152.5822	--	--	--	--	--	
%RSD	H0.21288	--	--	--	--	--	
#1	25113	--	--	--	--	--	--

000915

=3	25155	--	--	--	--	--	--

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thod: NOAIKW Sample Name: PS M8955 Operator: JC
n Time: 09/30/98 14:38:23
mment: M8955 Ag R#0372
de: CONC Corr Factor: 1

	Ag	Al	As	Ba	Be	Ca	Cd
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	.0439	1.1656	L-.0113	1.0033	L.0001	L.0707	L-.0002
Dev	.0008	.0069	.0042	.0001	.0001	.0087	.0005
RSD	1.945	4.179	36.93	1.822	88.26	12.28	330.4
=1	.0434	1.1731	1-.0069	1.0033	1.0000	1.0799	1-.0001
=2	.0445	1.1643	1-.0119	1.0032	1.0001	1.0697	1.0003
=3	.0438	1.1594	1-.0152	1.0033	1.0002	1.0628	1-.0007
rrors	IC Pass	IC Low	IC Low	IC Low	IC Low	IC Low	IC Low
igh	.0575	5.750	5.750	5.750	5.750	5.750	5.750
ow	.0425	4.250	4.250	4.250	4.250	4.250	4.250

lem	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	1-.0001	1.0002	1-.0021	1.0190	1.0842	1.0016	1.0171
Dev	.0008	.0002	.0003	.0067	.0082	.0001	.0030
RSD	884.4	122.0	12.05	35.42	8.694	4.042	17.02
=1	1-.0002	1.0002	1-.0020	1.0250	1.0906	1.0016	1.0157
=2	1-.0009	1-.0000	1-.0024	1.0117	1.1026	1.0016	1.0209
=3	1.0007	1.0003	1-.0019	1.0203	1.0885	1.0015	1.0157
rr s	IC Low	IC Low	IC Low	IC Low	IC Low	IC Low	IC Low
igh	5.750	5.750	5.750	5.750	57.50	5.750	5.750
ow	4.250	4.250	4.250	4.250	42.50	4.250	4.250

lem	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
nits	ppm	ppm	ppm	ppm			ppm
vge	1-.0000	1.0023	1.8915	1.0015	.0028	.0045	1.0012
Dev	.0001	.0005	.0060	.0017	.0023	.0041	.0093
RSD	401.3	22.02	.6767	113.5	83.40	91.77	755.0
=1	1-.0001	1.0017	1.8876	1.0029	.0054	.0080	1.0057
=2	1.0000	1.0026	1.8985	1.0020	.0016	.0076	1.0071
=3	1.0000	1.0026	1.8885	1-.0004	.0013	-.0002	1-.0094
rrors	IC Low	IC Low	IC Low	IC Low	NOCHECK	NOCHECK	IC Low
igh	5.750	5.750	5.750	5.750			5.750
ow	4.250	4.250	4.250	4.250			4.250

	1860/1	1860/2	Sn	Tl	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vge	-.0019	.0128	1.0432	1-.0043	1.0003	1.0041	1.0039
Dev	.0050	.0228	.8706	.0078	.0004	.0012	.0[illegible]
RSD	258.6	181.5	2016.	182.8	148.5	26.45	80.07
=1	.0008	.0003	1.7910	1.0047	1.0007	1.0051	1.0052

000916

#3	.0011	.0288	1-.0112	1-.0099	1.0000	1.0051	1.0003
Errors	NOCHECK	NOCHECK	IC Low	IC Low	IC Low	IC Low	IC Low
High			5.750	5.750	5.750	5.750	5.750
Low			4.250	4.250	4.250	4.250	4.250

Elm	Se
Units	ppm
Avge	1.0031
SDev	.0161
%RSD	202.8
#1	1.0028
#2	1-.0050
#3	1.0284
Errors	IC Low
High	5.750
Low	4.250

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	280.082	--	--	--	--	--	--
Avge	24803	--	--	--	--	--	--
SDev	83.99008	--	--	--	--	--	--
%RSD	.3413861	--	--	--	--	--	--
#1	24838	--	--	--	--	--	--
#2	24575	--	--	--	--	--	--
#3	24897	--	--	--	--	--	--

Mt: NOAIKW Sample Name: 84492-8743 Operator: JC
Date: 09/30/98 14:41:36
Comment: M8955 Ag R#0372
Mode: CONC Corr Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1-.0001	.1479	1-.0097	.0279	1.0001	11.55	1-.0005
SDev	.0001	.0138	.0141	.0003	.0002	.04	.0002
%RSD	85.59	9.357	146.5	1.082	460.1	.3389	42.03
#1	1-.0001	.1322	1-.0168	.0275	1.0003	11.53	1-.0007
#2	1-.0000	.1532	1.0066	.0280	1-.0002	11.53	1-.0003
#3	1-.0001	.1583	1-.0188	.0281	1.0001	11.60	1-.0005
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Low	IC Pass	IC Low

High	30.00	1400.	80.00	27.00	30.00	1400	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0001	.0031	1-.0016	.0170	1.482	.0188	2.735
SDev	.0008	.0001	.0003	.0077	.038	.0005	.115
%RSD	951.2	13.08	21.68	45.37	2.563	2.780	.287

=1	1.0001	.0031	1-.0014	.0123	1.439	.0182	2.718
=2	1-.0006	.0031	1-.0020	.0127	1.511	.0193	2.743
=3	1.0007	.0039	1-.0014	.0259	1.406	.0188	2.711
rrors	LC Low	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
igh	20.00	60.00*	60.00	400.0	30.00	8.000	1400
ow	.0010	.0020	.0020	.0100	.1000	.0050	.0080

tem	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
nits	ppm	ppm	ppm	ppm			ppm
vge	1.0008	1.0015	10.54	1-.0008	.0075	.0040	1-.0011
Dev	.0001	.0023	.28	.0004	.0060	.0028	.0014
RSD	15.82	152.9	2.666	60.62	80.35	69.20	127.1
=1	1.0005	.0033	10.26	1-.0008	.0024	.0037	1-.0081
=2	1.0007	1-.0011	10.82	1-.0009	.0141	.0069	1.0008
=3	1.0007	.0024	10.53	1-.0002	.0058	.0014	1.0023
rrors	LC Low	LC Low	LC Pass	LC Low	NOCHECK	NOCHECK	LC Low
igh	30.00	60.00	200.0	30.00			60.00
ow	.0030	.0020	.2000	.0050			.0040

tem	1860/1	1860/2	Sn	Tl	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vge	.0053	.0166	1.069	.0155	.0063	.0160	.0052
Dev	.0013	.0084	1.302	.0098	.0003	.0013	.0036
RSD	24.34	50.62	121.8	63.03	5.553	8.113	70.00
=1	.0062	.0069	1-.4286	.0267	.0067	.0152	.0023
=2	.0038	.0206	1.702	.0085	.0061	.0175	.0093
=3	.0058	.0222	1.934	.0113	.0061	.0153	1.0029
r	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
igh			50.00	60.00	220.0	50.00	20.00
ow			.0030	.0080	.0030	.0050	.0030

tem	Se
nits	ppm
vge	.0132
Dev	.0054
RSD	40.87
=1	.0070
=2	.0153
=3	.0171
rrors	LC Pass
igh	60.00

ow .0020

	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
tem	V	--	--	--	--	--	--
ation	380.083	--	--	--	--	--	--
vge	21171	--	--	--	--	--	--
Dev	209.2210	--	--	--	--	--	--

000316

					--		--
=1	21698	--	--	--	--	--	--
=2	21283	--	--	--	--	--	--
=3	21434	--	--	--	--	--	--

thod: NOAIKW Sample Name: 8744 MS Operator: JC
n e: 09/30/98 14:46:44
m : M8955 Ag R#0372
de: CONC Corr. Factor: 1

lem	Ag	Al	As	Ba	Be	Ca	Cd
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	.0132	.1828	-.0052	.0286	.0003	11.56	.0001
Dev	.0003	.0198	.0161	.0004	.0004	.08	.0003
RSD	1.712	10.84	310.4	1.507	123.8	.7043	310.4
=1	.0124	.1747	-.0150	.0282	.0007	11.51	.0003
=2	.0139	.1880	.0134	.0285	.0005	11.65	-.0002
=3	.0123	.2051	-.0139	.0291	-.0001	11.51	.0002
nrors	LC Pass	LC Pass	LC Low	LC Pass	LC Low	LC Pass	LC Low
igh	30.00	1400.	60.00	27.00	30.00	1400.	15.00
ow	.0005	.1000	.0100	.0050	.0010	.0500	.0010

lem	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	-.0006	.0037	-.0022	.0330	1.479	.0186	2.721
Dev	.0004	.0001	.0005	.0018	.040	.0005	.022
RSD	61.67	11.09	20.77	14.46	2.709	2.811	.8082
=1	-.0008	.0038	-.0023	.0385	1.442	.0183	2.698
=2	-.0002	.0033	-.0026	.0298	1.473	.0183	2.728
=3	-.0009	.0041	-.0017	.0307	1.521	.0192	2.739
nrors	LC Low	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
igh	30.00	60.00	60.00	400.0	30.00	9.000	1400
ow	.0010	.0020	.0020	.0100	.1000	.0050	.0080

lem	Mn	Mo	Na	Ni	2903/1	2903/2	Sb
nits	ppm	ppm	ppm	ppm			ppm
vge	.0008	.0004	10.71	.0015	.0049	.0099	.0000
Dev	.0002	.0022	.26	.0010	.0036	.0071	.0083
RSD	21.10	612.7	2.459	68.55	71.93	71.85	831800.
=1	.0008	-.0020	10.58	.0018	.0061	.0111	.0072
=2	.0007	.0024	10.51	.0021	.0078	.0013	-.0027
=3	.0010	.0007	11.01	.0005	.0010	.0110	-.0045

nrs	LC Low	LC Low	LC Pass	LC Low	NOCHECK	NOCHECK	LC Low
g	30.00	60.00	200.0	30.00			60.00
w	.0030	.0020	.2000	.0050			.0040

lem	1980/1	1980/2	Sn	Ti	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
gn	-.0023	.0127	2.438	-.0057	.0067	.0055	.0033
vg	.0132	.0128	.783	.0089	.0001	.0017	.0142

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	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18.38	[illegible]
=1	.0184	-.0043	1.754	1-.0052	.0068	.0050	[illegible]
=2	-.0227	.0199	3.308	1-.0128	.0067	.0071	.0025
=3	-.0207	.0225	2.253	1.0009	.0068	.0072	.0087
rrors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
H			50.00	60.00	220.0	50.00	30.00
n			.0030	.0080	.0030	.0050	.0030

lem	Se
nits	ppm
vge	.0060
Dev	.0021
RSD	40.51
=1	1.0038
=2	.0080
=3	.0085
rrors	LC Pass
igh	60.00
ow	.0040

ntStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
lem	Y	--	--	--	--	--	--
avlen	360.063	--	--	--	--	--	--
vge	24813	--	--	--	--	--	--
Dev	318.5503	--	--	--	--	--	--
RSD	1.284254	--	--	--	--	--	--
=1	24830	--	--	--	--	--	--
=2	24761	--	--	--	--	--	--
=3	24847	--	--	--	--	--	--

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thod: NOALKW Sample Name: 8745 MSD Operator: JC
n Time: 09/30/98 14:51:51
mment: M8955 Ag R#0372
de: CONC Corr. Factor: 1

lem	Ag	Al	As	Ba	Be	Ca	Cd
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	.0425	.1462	1-.0074	.0286	1.0004	11.57	1-.0005
Dev	.0006	.0045	.0112	.0001	.0001	.04	.0008
RSD	1.462	3.054	151.9	.4940	30.89	.3394	173.3
=1	.0422	.1513	1-.0102	.0287	1.0005	11.52	1-.0009
=2	.0425	.1434	1.0050	.0284	1.0003	11.58	1.0005

=3	.0419	.1438	1-.0169	.0288	1.0005	11.54	1-.0009
rrors	LC Pass	LC Pass	LC Low	LC Pass	LC Low	LC Pass	LC Low
igh	30.00	1400.	60.00	27.00	30.00	1400.	15.00
ow	.0005	.1000	.0100	.0050	.0010	.0500	.0[illegible]
lem	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm

Avge	1-.0007	.0035	1-.0023	.0331	1.458	.0188	2.746
SDev	.0002	.0004	.0016	.0134	.012	.0003	.014
RSD	25.51	10.95	68.39	40.50	.8360	1.342	.5272
#1	1-.0009	.0039	1-.0035	.0214	1.469	.0190	2.739
#2	1-.0008	.0035	1-.0029	.0477	1.445	.0185	2.735
#3	1-.0005	.0031	1-.0005	.0301	1.459	.0189	2.757
Prep #	LC Low	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	30.00	60.00	60.00	100.0	30.00	9.000	1400
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Item	Mn	Mo	Na	Ni	2203/1	2203/2	Se
Units	ppm	ppm	ppm	ppm			ppm
Avge	1.0006	.0021	10.58	1.0020	.0007	.0029	.0062
SDev	.0001	.0018	.14	.0010	.0056	.0023	.0035
RSD	15.85	86.52	1.348	49.56	778.1	79.53	56.26
#1	1.0005	1.0015	10.66	1.0022	.0071	.0029	1.0023
#2	1.0005	1.0006	10.41	1.0029	-.0033	.0006	.0073
#3	1.0007	.0042	10.66	1.0009	-.0016	.0052	.0090
Preps	LC Low	LC Pass	LC Pass	LC Low	NOCHECK	NOCHECK	LC Pass
High	30.00	60.00	200.0	30.00			60.00
Low	.0030	.0020	.2000	.0050			.0040

Item	1960/1	1960/2	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	-.0080	.0184	2.130	1.0075	.0067	1.0044	1.0022
SDev	.0135	.0215	1.262	.0051	.0000	.0012	.0028
RSD	226.8	131.4	59.24	67.88	.4492	26.65	119.2
#1	-.0148	.0080	1.791	.0115	.0067	.0051	.0043
#2	.0096	-.0005	1.072	.0082	.0067	.0051	1-.0007
#3	-.0128	.0406	3.526	1.0018	.0067	1.0031	1.0030
Preps	NOCHECK	NOCHECK	LC Pass	LC Low	LC Pass	LC Low	LC Low
High			50.00	80.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0030

Item	Se
Units	ppm
Avge	.0083
SDev	.0121
RSD	130.4
#1	1.0011
#2	1.0032
#3	.0232

Item	LC Pass
High	80.00
Low	.0040

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PrepStd	1	2	3	4	5	6	7
Type	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Conc		--	--	--	--		

Wavlen	360.053	--	--	--	--	--	--
Avge	24605	--	--	--	--	--	--
SDev	75.60423	--	--	--	--	--	--
%RSD	.3072718	--	--	--	--	--	--
#1	24519	--	--	--	--	--	--
#2	24661	--	--	--	--	--	--
#3	24635	--	--	--	--	--	--

Method: NOAIKW Sample Name: 8739 Operator: JC
Run Time: 09/30/98 14:56:59
Comment: M8955 Ag R#0372
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0002	.2388	L.0055	.0203	L.0001	15.48	L.0001
SDev	.0001	.0174	.0010	.0003	.0002	.05	.0001
%RSD	85.38	7.277	18.00	1.327	187.1	.3549	594.1
#1	L-.0002	.2246	L.0067	.0200	L.0003	15.52	L-.0003
#2	L-.0000	.2337	L.0050	.0203	L.0002	15.50	L.0006
#3	L-.0002	.2582	L.0049	.0206	L-.0001	15.42	L-.0000
Errors	LC Low	LC Pass	LC Low	LC Pass	LC Low	LC Pass	LC Low
High	30.00	1400.	60.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0003	.0031	L-.0026	.0865	1.377	.0220	2.989
SDev	.0004	.0007	.0008	.0035	.013	.0005	.006
%R	116.0	23.50	31.47	4.015	.9253	2.242	.1983
#1	L.0001	.0038	L-.0032	.0826	1.364	.0217	2.989
#2	L-.0005	.0031	L-.0017	.0877	1.378	.0217	2.984
#3	L-.0008	.0024	L-.0029	.0892	1.389	.0225	2.992
Errors	LC Low	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	30.00	60.00	60.00	100.0	30.00	8.000	1400.
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Elem	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	L.0026	L-.0012	12.01	L.0026	.0002	.0063	L.0028
SDev	.0001	.0030	.22	.0013	.0010	.0057	.0039
%RSD	2.541	262.7	1.820	48.16	537.0	90.31	138.1
#1	L.0027	L-.0047	11.82	L.0016	.0001	.0106	L.0005

#2	L.0028	L.0006	11.97	L.0010	.0013	-.0002	.0173
#3	L.0028	L.0008	12.25	L.0022	-.0008	.0085	L.0006
Errors	LC Low	LC Low	LC Pass	LC Low	NOCHECK	NOCHECK	LC Low
High	30.00	60.00	200.0	30.00			60.00
Low	.0030	.0020	.2000	.0050			.0040

Elem 1980/1 1980/2 Sn Tl

000922

			ppm	ppm	ppm	ppm	ppm
Avge	- .0126	.0122	1.467	1.0013	.0107	1.0024	.0043
SDev	.0180	.0116	2.039	.0228	.0002	.0012	.0035
%RSD	143.3	95.13	139.0	1736.	1.484	49.62	82.56
±1	.0064	.0106	1.863	.0216	.0105	1.0010	.0071
±2	-.0146	.0015	1-.7406	1-.0234	.0107	1.0031	1.0003
±3	- .0295	.0245	3.279	1.0057	.0109	1.0031	.0054
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Pass	LC Low	LC Pass
High			50.00	60.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0030

Elem	Se
Units	ppm
Avge	.0043
SDev	.0069
%RSD	161.7
±1	.0095
±2	1- .0036
±3	.0069
Errors	LC Pass
High	60.00
Low	.0040

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	360.063	--	--	--	--	--	--
Avge	24524	--	--	--	--	--	--
SDv	277.0421	--	--	--	--	--	--
%R	1.129882	--	--	--	--	--	--
±1	24764	--	--	--	--	--	--
±2	24588	--	--	--	--	--	--
±3	24221	--	--	--	--	--	--

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thod: NOALKW Sample Name: 8740 Operator: JC
n Time: 09/30/98 15:02:07
mment: M8955 Ag R#0372
de: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0000	.3639	.0129	.0152	1.0001	9.916	1.0001
SDev	.0001	.0055	.0026	.0001	.0000	.094	.0006
%RSD	115.1	1.515	20.29	.6470	50.85	.9479	725.4

	1-.0001	.3612	.0100	.0152	1.0001	9.829	1-.0002
	1.0000	.3702	.0134	.0153	1.0001	9.903	1-.0003
	1.0000	.3602	.0151	.0151	1.0001	10.02	1.0001
rors	LC Low	LC Pass	LC Pass	LC Pass	LC Low	LC Pass	LC Low
gh	30.00	1400	80.00	27.00	30.00	1400	15.00
w	.0005	.1000	.0100	.0050	.0010		

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L.0001	.0036	L-.0017	.1920	1.221	.0199	2.758
SDev	.0003	.0002	.0003	.0249	.019	.0003	.041
%RSD	171.3	6.605	14.62	12.99	1.527	1.310	1.602
#1	L-.0002	.0034	L-.0015	.1673	1.202	.0197	2.711
#2	L.0004	.0035	L-.0020	.2171	1.223	.0199	2.764
#3	L.0000	.0039	L-.0016	.1915	1.239	.0202	2.798
Errors	LC Low	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	30.00	60.00	60.00	400.0	30.00	9.000	1400
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Elem	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.0077	L.0013	11.08	L.0025	.0069	.0038	L-.0038
SDev	.0001	.0014	.06	.0012	.0036	.0077	.0112
%RSD	1.798	106.6	.5040	50.34	52.30	203.0	280.6
#1	.0075	L-.0002	11.04	L.0038	.0044	-.0048	.0124
#2	.0077	L.0016	11.07	L.0013	.0052	.0061	L-.0112
#3	.0078	.0025	11.15	L.0022	.0110	.0101	L-.0130
Errors	LC Pass	LC Low	LC Pass	LC Low	NOCHECK	NOCHECK	LC Low
High	30.00	60.00	200.0	30.00			60.00
Low	.0030	.0020	.2000	.0050			.0040

Elem	1860/1	1860/2	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	-.0034	.0179	1.920	L-.0111	.0081	L.0031	.0048
SDev	.0018	.0142	.628	.0077	.0001	.0021	.0061
%RSD	53.03	79.41	32.71	69.02	.7692	65.93	127.0
#1	-.0043	.0333	1.212	L-.0033	.0080	L.0010	L-.0017
#2	-.0045	.0054	2.410	L-.0187	.0081	.0051	.0058
#3	-.0013	.0149	2.137	L-.0115	.0081	L.0031	.0104
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Pass	LC Low	LC Pass
High			50.00	60.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0030

Elem	Se
Units	ppm
Avge	.0111
SDev	.0094
%RSD	84.68

.0211
L.0021
.0099

Errors	LC Pass
High	60.00
Low	.0040

		NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
	--	--	--	--	--	--
Wavlen 360.063	--	--	--	--	--	--
Avge 24111	--	--	--	--	--	--
SDev 130.5388	--	--	--	--	--	--
%RSD .5340387	--	--	--	--	--	--
#1 24576	--	--	--	--	--	--
#2 24140	--	--	--	--	--	--
24315	--	--	--	--	--	--

Method: NOAIKW Sample Name: CCV Operator: JC
Run Time: 09/30/98 15:08:29
Comment: M8955 Ag R#0372
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9873	9.192	.9606	.9882	1.021	9.856	.9858
SDev	.0013	.036	.0322	.0127	.004	.046	.0079
%RSD	.1362	.3912	3.348	1.290	.3606	.4646	.8048
#1	.9868	9.227	.9445	.9848	1.025	9.904	.9805
#2	.9863	9.155	.9397	.9777	1.020	9.852	.9921
#3	.9888	9.193	.9976	1.002	1.018	9.812	.9950
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.000	10.00	1.000	1.000	1.000	10.00	1.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9841	.9789	.9854	.9988	Q-.0102	Q.0015	.9888
SDev	.0094	.0031	.0069	.0112	.0097	.0000	.0054
%RSD	.9492	.3164	.6966	1.116	95.15	.6581	.5458
#1	.9900	.9822	.9850	1.012	Q-.0118	Q.0015	.9849
#2	.9874	.9760	.9788	.9913	Q.0002	Q.0015	.9868
#3	1.005	.9786	.9925	.9935	Q-.0191	Q.0015	.9846
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass
Value	1.000	1.000	1.000	1.000	10.00	10.00	1.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	1.004	.9691	9.839	.9885	.9716	.9634	1.013
SDev	.004	.0065	.231	.0049	.0007	.0094	.005

.4005	.8712	2.349	.4943	.0680	.0728	.2578
.005	.9618	9.817	.9808	.9720	.9720	1.010
.9993	.9709	9.820	.9830	.9719	.9543	1.009
1.007	.9745	10.08	.9925	.9708	.9631	1.012
Errors QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK
Value 1.000	1.000	10.00	1.000			

Range	10.00	10.00	10.00	10.00			
Elem	196071	196072	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.9483	.9768	Q3.181	.9332	.9890	1.012	.9661
SDev	.0078	.0098	.538	.0368	.0063	.002	.0063
%RSD	.8195	1.002	16.91	3.946	.6382	.2276	.6487
#1	.9402	.9754	Q3.775	.9757	.9922	1.015	.9726
#2	.9557	.9678	Q3.044	.9104	.9817	1.010	.9601
#3	.9490	.9872	Q2.726	.9136	.9930	1.011	.9658
Errors	NOCHECK	NOCHECK	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value			1.000	1.000	1.000	1.000	1.000
Range			10.00	10.00	10.00	10.00	10.00

Elem	Se
Units	ppm
Avge	.9876
SDev	.0062
%RSD	.6411
#1	.9840
#2	.9841
#3	.9748
Errors	QC Pass
Value	1.000
Range	10.00

IntStd	1	2	3	4	5	6	7
Ic	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Ic	V	--	--	--	--	--	--
Baylen	360 083	--	--	--	--	--	--
Avge	24274	--	--	--	--	--	--
SDev	268.2561	--	--	--	--	--	--
%RSD	1.105102	--	--	--	--	--	--
#1	24493	--	--	--	--	--	--
#2	24355	--	--	--	--	--	--
#3	23975	--	--	--	--	--	--

Method: NOAIKW Sample Name: CCB Operator: JC
Run Time: 09/30/98 15:13:38
Comment: M8955 Ag R#0372
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd

	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	H.0002	.0200	L-.0103	.0009	H.0011	.0118	H.0010
SDev	.0002	.0111	.0034	.0003	.0004	.0018	.0009
%RSD	35.83	55.80	33.02	38.58	32.21	15.01	91.17
1	H.0007	.0328	L-.0069	.0012	H.0015	.0130	H.0018
2	H.0011	.0150	L-.0104	.0007	H.0011	.0098	-.0000
3	.0005	.0122	L-.0128	.0007	H.0008		

-rrors	LC High	LC Pass	LC Low	LC Pass	LC High	LC Pass	LC High
High	.0007	.1000	.0040	.0020	.0002	.1000	.0003
ow	-.0007	-.1000	-.0040	-.0020	-.0002	-.1000	-.0003

Item	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
v	.0005	.0007	I-.0016	.0147	.0016	.0016	H.0113
	.0007	.0003	.0004	.0112	.0227	.0001	.0020
RSD	138.3	45.70	24.87	76.37	1391.	3.683	17.44
	H.0010	.0009	I-.0013	.0161	-.0199	.0015	H.0125
2	-.0003	.0003	I-.0021	H.0252	.0254	.0016	H.0121
3	.0007	.0009	I-.0015	.0028	-.0006	.0016	H.0093

rrors	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC High
igh	.0010	.0010	.0010	.0200	.1000	.0050	.0080
ow	-.0010	-.0010	-.0010	-.0200	-.1000	-.0050	-.0080

Item	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
nits	ppm	ppm	ppm	ppm			ppm
vge	.0010	H.0032	.0086	.0008	.0059	.0079	H.0046
Dev	.0002	.0022	.0029	.0012	.0025	.0046	.0076
RSD	23.26	69.80	33.22	145.0	42.80	57.94	166.2
1	.0013	H.0053	.0115	.0009	.0049	.0061	H.0125
2	.0010	.0008	.0086	-.0004	.0088	.0131	-.0028
3	.0008	H.0035	.0058	.0020	.0040	.0045	H.0041

rrors	LC Pass	LC High	LC Pass	LC Pass	NOCHECK	NOCHECK	LC High
igh	.0030	.0020	.2000	.0050			.0040
ow	-.0030	-.0020	-.2000	-.0050			-.0040

	1960/1	1960/2	Sn	Ti	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vge	.0023	.0179	1.988	-.0073	.0012	.0017	H.0072
Dev	.0201	.0122	1.241	.0101	.0004	.0031	.0039
RSD	881.3	68.31	62.43	139.0	31.52	180.5	53.82
1	.0232	.0287	2.879	-.0055	.0007	H.0051	H.0067
2	-.0188	.0186	2.513	.0018	.0014	.0011	H.0117
3	.0005	.0053	.5704	I-.0182	.0014	-.0010	H.0144

rrors	NOCHECK	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC High
igh				.0080	.0030	.0050	.0030
ow				-.0080	-.0030	-.0050	-.0030

Item	Se
nits	ppm

g	H.0130
	.0130
SD	99.62
	H.0279
	H.0071
	H.0041

High	.0040						
Low	-.0040						
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	\	--	--	--	--	--	--
W[illegible]n	360.083	--	--	--	--	--	--
A	24102	--	--	--	--	--	--
SDev	41.81731	--	--	--	--	--	--
%RSD	.1705487	--	--	--	--	--	--
#1	24150	--	--	--	--	--	--
#2	24380	--	--	--	--	--	--
#3	24378	--	--	--	--	--	--

Method: NOAIKW Sample Name: 8741 Operator: JC
[illegible]n Time: 09/30/98 15:18:46
Comment: M8855 Ag R#0372
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0001	.1427	1-.0095	.0085	1.0006	8.044	1-.0001
SDev	.0002	.0053	.0052	.0001	.0001	.059	.0003
%RSD	182.8	3.721	54.12	1.007	23.90	.6548	278.3
#1	1.0002	.1368	1-.0083	.0085	1.0008	8.108	1-.0002
#2	1-.0001	.1442	1-.0051	.0086	1.0006	8.031	1.0002
#3	1.0002	.1472	1-.0152	.0085	1.0005	8.982	1-.0003
Errors	LC Low	LC Pass	LC Low	LC Pass	LC Low	LC Pass	LC Low
[illegible]	30.00	1400.	60.00	27.00	30.00	1400.	15.00
[illegible]	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1-.0003	.0040	1-.0013	.0255	1.198	.0192	2.711
SDev	.0006	.0003	.0001	.0089	.014	.0001	.005
%RSD	211.9	7.285	11.35	34.83	1.155	.3426	.2134
#1	1-.0008	.0039	1-.0011	.0252	1.194	.0193	2.706
#2	1.0001	.0038	1-.0014	.0187	1.186	.0191	2.710
#3	1-.0005	.0043	1-.0014	.0344	1.213	.0192	2.717
Errors	LC Low	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	30.00	60.00	60.00	100.0	30.00	8.000	1400.
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Elem	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	1.0004	1.0016	10.51	1.0016	.0064	.0085	1-.0039
SDev	.0001	.0015	.04	.0010	.0028	.0087	.0079
%RSD	18.91	97.14	.3683	60.55	43.96	101.9	204.5
#1	1.0005	.0024	10.61	1.0005	.0080	.0181	1.0073
#2	1.0005	1-.0002	10.57	1.0022	.0021	.0060	

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			-0.05	1.0022	.0080	.0014	1-.0128

Errors	LC Low	LC Low	LC Pass	LC Low	NOCHECK	NOCHECK	LC Low
High	30.00	60.00	200.0	30.00			60.00
Low	.0020	.0020	.2000	.0050			.0040

Elem	196071	196072	Sn	Ti	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
[illegible]	.0223	.0144	1.751	1-.0068	.0111	.0057	.0078
[illegible]	.0051	.0172	2.353	.0135	.0003	.0012	.0061
%RSD	22.76	119.1	134.4	200.8	3.053	20.68	78.04
#1	.0188	-.0043	.6595	1-.0219	.0112	.0050	.0148
#2	.0233	.0294	1.452	1-.0029	.0113	.0071	.0050
#3	.0282	.0182	.1422	1.0045	.0107	.0051	.0036
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High			50.00	60.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0030

Elem	Se
Units	ppm
Avge	.0171
SDev	.0128
%RSD	73.78
#1	1.0030
#2	.0277
#3	.0211
Errors	LC Pass
High	60.00
Low	.0040

[illegible]	1	2	3	4	5	6	7
[illegible]ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
[illegible]lem	Y	--	--	--	--	--	--
[illegible]avlen	380.063	--	--	--	--	--	--
[illegible]vge	24737	--	--	--	--	--	--
[illegible]Dev	154.0985	--	--	--	--	--	--
[illegible]RSD	.6229388	--	--	--	--	--	--
[illegible]	24915	--	--	--	--	--	--
[illegible]	24657	--	--	--	--	--	--
[illegible]	24640	--	--	--	--	--	--

[illegible]ed: NOAIKW Sample Name: 8712 Operator: [illegible]
[illegible]Time: 09/30/98 15:23:53
[illegible]or M8955 Ag R=0372
[illegible] C Corr. Factor: 1

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[illegible]	Ag	Al	As	Ba	Be	Ca	Cd
[illegible]	ppm	ppm	ppm	ppm	ppm	ppm	ppm
[illegible]	1-.0004	2528	1-.0024	.0282	1.0004	11.83	1-.0001
[illegible]	.0003	.0090	.0052	.0002	.0003	[illegible]	[illegible]

RSD	58.88	3.548	219.9	.8542	65.31	.8706	113.2
#1	I-.0005	.2623	I-.0035	.0283	I.0002	11.73	I-.0002
#2	I-.0001	.2518	I-.0069	.0283	I.0003	11.62	I-.0001
#3	I-.0007	.2411	I.0033	.0279	I.0007	11.53	I.0000
errors	IC Low	IC Pass	IC Low	IC Pass	IC Low	IC Pass	IC Low
High	30.00	1400.	60.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	I-.0014	.0041	I-.0024	.0510	1.523	.0183	3.314
SDev	.0004	.0002	.0002	.0063	.021	.0001	.022
RSD	31.71	5.442	7.017	12.38	1.364	.3868	.6675
#1	I-.0015	.0041	I-.0022	.0529	1.529	.0183	3.320
#2	I-.0009	.0043	I-.0023	.0440	1.541	.0183	3.333
#3	I-.0017	.0039	I-.0025	.0582	1.500	.0184	3.290
errors	IC Low	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
High	30.00	60.00	60.00	400.0	30.00	9.000	1400.
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Elem	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	I.0024	I.0007	10.52	I.0008	.0042	.0099	I.0018
SDev	.0002	.0015	.06	.0005	.0067	.0063	.0076
RSD	8.738	234.9	.5423	59.00	160.2	62.98	425.3
#1	I.0026	I-.0002	10.53	I.0011	.0119	.0038	.0091
#2	I.0023	.0024	10.46	I.0009	-.0005	.0182	I.0023
#3	I.0024	I-.0002	10.57	I.0003	.0012	.0098	I-.0061
errors	IC Low	IC Low	IC Pass	IC Low	NOCHECK	NOCHECK	IC Low
High	30.00	60.00	200.0	30.00			60.00
Low	.0030	.0020	.2000	.0050			.0040

Elem	1960/1	1960/2	Sn	Ti	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	-.0020	.0170	2.341	I-.0067	.0089	I.0031	.0080
SDev	.0080	.0088	.617	.0104	.0004	.0000	.0023
RSD	298.5	51.81	26.35	155.1	6.510	1.357	28.75
#1	-.0046	.0241	2.805	I-.0012	.0067	I.0031	.0085
#2	-.0082	.0072	2.438	I-.0187	.0074	I.0031	.0107
#3	.0048	.0197	1.682	I-.0002	.0066	I.0030	.0069
errors	NOCHECK	NOCHECK	IC Pass	IC Low	IC Pass	IC Low	IC Pass

Ti		50.00	80.00	220.0	50.00	30.00
		.0030	.0080	.0030	.0050	.0030

Elem	Se
Units	ppm
Avge	.0110
SDev	.0080
RSD	82.92

#1	.0149
#2	L .0030
#3	.0151

Errors	LC Pass
High	80.00
Low	.0040

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Davlen	360.073	--	--	--	--	--	--
Avge	24578	--	--	--	--	--	--
SDev	255.8150	--	--	--	--	--	--
%RSD	1.040844	--	--	--	--	--	--
#1	24435	--	--	--	--	--	--
#2	24425	--	--	--	--	--	--
#3	24873	--	--	--	--	--	--

Method: NOAIKW Sample Name: 8746 Operator: JC
Run Time: 09/30/98 15:29:01
Comment: M8955 Ag R#0272
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0005	.1758	L.0006	L.0041	L.0005	.1260	L.0003
SDev	.0004	.0048	.0075	.0001	.0003	.0026	.0006
%RSD	81.66	2.755	1355.	1.613	49.25	2.059	238.9
#1	L-.0009	.1752	L-.0066	L.0040	L.0008	.1280	L.0010
#2	L-.0002	.1712	L-.0001	L.0041	L.0005	.1230	L-.0001
#3	L-.0004	.1808	L.0083	L.0041	L.0003	.1268	L-.0001
Errors	LC Low	LC Pass	LC Low	LC Low	LC Low	LC Pass	LC Low
High	30.00	1400.	60.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0012	L.0002	L-.0021	.0116	.1049	L.0016	.0206
SDev	.0006	.0006	.0001	.0116	.0145	.0001	.0032
%RSD	52.58	288.2	19.28	100.3	13.81	2.963	15.71
#1	L-.0014	L.0003	L-.0028	L.0071	L.0942	L.0016	.0238
#2	L-.0018	L-.0004	L-.0018	L.0029	.1214	L.0017	.0173
#3	L-.0005	L.0007	L-.0020	.0248	L.0991	L.0016	.0207

Elem	LC Low	LC Low	LC Low	LC Pass	LC Pass	LC Low	LC Pass
High	30.00	60.00	60.00	100.0	30.00	8.000	1400.
Low	.0010	.0020	.0020	.0100	.1000	.0050	[illegible]

Elem	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	L-.0002	L-.0001	.8623	L.0001	.0054	.0047	.0090

SDev	.0000	.0005	.0176	.0019	.0080	.0134	.0045
%RSD	4.203	143.0	2.044	1499.	149.3	327.9	49.86
#1	1.0002	1-.0009	.8675	1.0020	-.0005	.0196	1.0039
#2	1.0002	1-.0001	.8427	1.0001	.0021	-.0040	.0124
#3	1.0002	1-.0001	.8767	1-.0017	.0145	-.0033	.0107
[illegible]	LC Low	LC Low	LC Pass	LC Low	NOCHECK	NOCHECK	LC Pass
[illegible]	30.00	60.00	200.0	30.00			60.00
Low	.0030	.0020	.2000	.0050			.0040

Item	196071	196072	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	-.0130	.0112	.2606	1-.0007	1-.0000	.0064	.0045
SDev	.0138	.0173	.7026	.0246	.0007	.0012	.0076
%RSD	105.9	154.4	269.6	3352.	21500.	18.94	169.0
#1	-.0137	.0159	1.037	.0276	1-.0000	.0050	.0128
#2	-.0265	-.0079	1-.3305	1-.0150	1-.0007	.0071	1-.0020
#3	.0011	.0256	.0749	1-.0148	1.0007	.0071	1.0026
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Low	LC Pass	LC Pass
High			50.00	60.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0030

Item	Se
Units	ppm
Avge	1.0034
SDev	.0160
%RSD	464.6
#1	.0064
#2	1-.0138
#3	.0177
Errors	LC Low
High	60.00
Low	.0040

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Item	Y	--	--	--	--	--	--
Average	360.083	--	--	--	--	--	--
Avge	24784	--	--	--	--	--	--
SDev	185.1594	--	--	--	--	--	--
%RSD	747.8958	--	--	--	--	--	--
1	24876	--	--	--	--	--	--

2	24834	--	--	--	--	--	--
3	24882	--	--	--	--	--	--

Method: NOAIKW Sample Name: 84464-8677 Operator: JC 000932
Run Time: 09/30/98 15:34:09
Comment: M8955 Ag R#0372
Mode: CONC Corr. Factor: 1

	[illegible]	[illegible]	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0002	.2651	L.0006	.0411	L.0005	20.04	L-.0002
SDev	.0002	.0742	.0083	.0012	.0002	.07	.0005
%RSD	148.1	27.97	1446.	2.991	39.44	.3603	207.9
#1	L-.0003	.2023	L-.0034	.0389	L.0003	20.11	L-.0005
#2	L.0001	.2480	L-.0050	.0411	L.0004	20.08	L-.0004
#3	L-.0003	.3469	.0101	.0424	L.0007	19.98	L.0003
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Low	IC Pass	IC Low
High	30.00	1400.	60.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0005	.0045	L-.0030	.1235	2.267	.0202	1.656
SDev	.0003	.0005	.0003	.0069	.072	.0001	.024
%RSD	60.67	11.03	8.661	5.602	3.195	.7484	1.421
#1	L-.0005	.0047	L-.0028	.1310	2.186	.0201	1.682
#2	L-.0002	.0039	L-.0029	.1175	2.292	.0204	1.650
#3	L-.0008	.0049	L-.0033	.1220	2.324	.0202	1.638
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
High	30.00	60.00	60.00	400.0	30.00	8.000	1400.
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Elem	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.0043	L-.0015	15.43	L.0010	.0052	.0078	L-.0001
SDev	.0001	.0020	.32	.0007	.0036	.0050	.0083
%RSD	2.277	132.8	2.084	71.57	69.24	63.59	12190.
#1	.0043	L-.0039	15.07	L.0005	.0094	.0114	L-.0029
#2	.0041	L-.0004	15.54	L.0007	.0030	.0098	L-.0015
#3	.0043	L-.0004	15.69	L.0018	.0032	.0021	.0072
Errors	IC Pass	IC Low	IC Pass	IC Low	NOCHECK	NOCHECK	IC Low
High	30.00	60.00	200.0	30.00			60.00
Low	.0030	.0020	.2000	.0050			.0040

Elem	1960/1	1960/2	Sn	Ti	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.0074	.0101	.3546	L-.0067	.0128	.0051	.0069
SDev	.0027	.0141	1.056	.0062	.0004	.0000	.0042
%RSD	36.01	139.8	297.7	92.26	2.929	.1928	59.82
#1	.0045	.0163	L-.8844	L-.0010	.0133	.0051	.0107

#4	.0093	L-.0061	.9575	L-.0058	.0128	.0051	.0078
#5	.0080	.0200	.9708	L-.0132	.0128	.0051	L.0025
Errors	NOCHECK	NOCHECK	IC Pass	IC Low	IC Pass	IC Pass	IC Pass
High			50.00	60.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0030

Elem	Se

Avge	.0095
SDev	.0088
%RSD	92.90
#1	.0127
#2	1-.0005
#3	.0163
Errors	IC Pass
High	80.00
Low	.0040

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	\	--	--	--	--	--	--
Gaylen	280.080	--	--	--	--	--	--
Avge	24707	--	--	--	--	--	--
SDev	34.87119	--	--	--	--	--	--
%RSD	.1411389	--	--	--	--	--	--
#1	24667	--	--	--	--	--	--
#2	24731	--	--	--	--	--	--
#3	24723	--	--	--	--	--	--

Method: NOA1KW Sample Name: 8678 Operator: JC
Run Time: 09/30/98 15:39:17
Comment: M8955 Ag R#0372
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.0000	.1298	.0123	.0299	1.0004	18.73	1-.0002
SD	.0002	.0171	.0111	.0002	.0001	21	.0003
%RSD	1140.	13.20	90.69	.8592	20.15	1.111	155.5
#1	1-.0001	.1103	.0151	.0300	1.0003	18.94	1-.0001
#2	1-.0001	.1368	.0217	.0296	1.0005	18.72	1-.0004
#3	1.0002	.1423	1-.0000	.0299	1.0004	18.52	1.0001
Errors	IC Low	IC Pass	IC Pass	IC Pass	IC Low	IC Pass	IC Low
High	30.00	1400.	80.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1-.0009	.0040	1-.0029	.0163	2.201	.0190	1.498
SDev	.0002	.0000	.0007	.0075	.020	.0001	.019
%RSD	21.91	.5958	23.92	46.00	.9199	.5337	1.281

	1-.0008	.0041	1-.0021	.0208	2.224	.0190	1.488
	1-.0008	.0040	1-.0025	.0205	2.196	.0191	1.485
	1-.0012	.0041	1-.0037	1.0077	2.185	.0188	1.500
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
High	30.00	80.00	80.00	400.0	30.00	9.000	1400.
Low	.0010	.0020	.0020	.0100	.1000		

Elem	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	1.0001	1.0002	14.07	1-.0004	.0053	.0114	1-.0045
SDev	.0001	.0013	.05	.0013	.0023	.0047	.0073
%RSD	71.80	557.2	.3698	346.3	43.94	41.75	161.0
#1	1.0002	1-.0012	14.08	1.0007	.0028	.0083	1-.0096
	1.0000	1.0014	14.11	1-.0019	.0056	.0089	1.0038
	1.0002	1.0005	14.01	1.0000	.0075	.0168	1-.0079
Errors	LC Low	LC Low	LC Pass	LC Low	NOCHECK	NOCHECK	LC Low
High	30.00	60.00	200.0	30.00			60.00
Low	.0030	.0020	.2000	.0050			.0040

Elem	196071	196072	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.0183	.0211	.6133	1-.0089	.0130	1.0044	.0093
SDev	.0165	.0023	1.729	.0090	.0004	.0011	.0038
%RSD	89.95	10.81	282.0	101.2	2.771	26.21	41.07
#1	.0371	.0238	2.533	1-.0183	.0126	.0051	.0065
#2	.0117	.0196	1-.8237	1-.0002	.0132	.0050	.0078
#3	.0062	.0200	.1309	1-.0083	.0133	1.0031	.0137
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Pass	LC Low	LC Pass
High			50.00	60.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0030

Elem	Se
Units	ppm
Avge	.0205
SDev	.0070
%RS	33.96
#1	.0285
#2	.0173
#3	.0157
Errors	LC Pass
High	60.00
Low	.0040

tStd	1	2	3	4	5	6	7
de	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
em	Y	--	--	--	--	--	--
vlen	380.063	--	--	--	--	--	--
ge	21719	--	--	--	--	--	--

172.9315	--	--	--	--	--	--
8987110	--	--	--	--	--	--
21852	--	--	--	--	--	--
21919	--	--	--	--	--	--
21817	--	--	--	--	--	--

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n Time: 09/30/98 15:11:25
omment: M8955 Ag R#0372
ode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0001	.1513	.0013	.0284	-.0003	17.24	.0005
SD	.0004	.0060	.0167	.0002	.0001	.17	.0005
%RSD	284.4	3.935	1235.	.5898	41.69	1.004	90.49
#1	-.0005	.1483	.0031	.0284	-.0002	17.53	.0008
#2	.0002	.1582	-.0161	.0285	-.0005	17.27	-.0000
#3	-.0001	.1476	.0170	.0282	-.0002	17.20	.0009
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Low	IC Pass	IC Low
High	30.00	1400.	60.00	27.00	30.00	1400	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0008	.0048	-.0027	.0320	1.639	.0205	4.375
SDev	.0007	.0009	.0003	.0163	.032	.0003	.061
%RSD	83.09	19.42	9.891	51.07	1.945	1.370	1.399
#1	-.0014	.0045	-.0029	.0183	1.655	.0206	4.420
#2	-.0010	.0058	-.0028	.0275	1.660	.0208	4.401
#3	-.0001	.0040	-.0024	.0500	1.602	.0202	4.308
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
High	30.00	60.00	60.00	400.0	30.00	9.000	1400.
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Elem	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.0001	-.0009	12.48	.0005	-.0010	.0077	.0093
SDev	.0000	.0019	.21	.0028	.0010	.0111	.0060
%RSD	7.845	204.6	1.651	526.0	103.1	144.1	64.62
#1	.0001	.0006	12.62	.0026	-.0020	-.0049	.0163
#2	.0001	-.0003	12.57	-.0018	.0001	.0160	.0059
#3	.0001	-.0031	12.24	-.0002	-.0011	.0119	.0058
Errors	IC Low	IC Low	IC Pass	IC Low	NOCHECK	NOCHECK	IC Pass
High	30.00	60.00	200.0	30.00			60.00
Low	.0030	.0020	.2000	.0050			.0040

Elem	1960/1	1960/2	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	-.0228	.0201	3.400	-.0151	.0097	.0060	.0048

SD	.0287	.0151	.570	.0013	.0001	.0024	.0077
%RSD	126.8	75.33	16.76	8.707	.4874	40.38	160.6
#1	-.0237	.0155	4.045	-.0159	.0097	.0032	-.0039
#2	-.0507	.0370	3.191	-.0136	.0097	.0071	.0107
#3	.0088	.0078	2.964	-.0158	.0096	.0074	.0076
Errors	NOCHECK	NOCHECK	IC Pass	IC Low	IC Pass	IC [illegible]	

Low	.0030	.0080	.0030	.0050	.0020

Elem	Se
Units	ppm
Avge	.0082
SDev	.0030
RSD	17.71
#1	1.0028
#2	.0081
#3	.0077
Errors	IC Pass
High	60.00
Low	.0010

IntStd	1	2	3	4	5	6	7
Code	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	360.063	--	--	--	--	--	--
Avge	23782	--	--	--	--	--	--
SDev	84.29878	--	--	--	--	--	--
RSD	.2703838	--	--	--	--	--	--
#1	23784	--	--	--	--	--	--
#2	23713	--	--	--	--	--	--
#3	23840	--	--	--	--	--	--

Method: NOAHKK Sample Name: 8680 Operator: JC
Run Time: 09/30/98 15:49:33
Comment: M8955 Ag R#0372
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	.2347	-.0044	.0428	-.0003	21.27	.0001
SDev	.0002	.0092	.0053	.0002	.0001	.16	.0002
RSD	77.33	3.928	121.4	.4820	18.93	.7579	220.6
#1	-.0004	.2412	-.0014	.0427	-.0003	21.43	-.0001
#2	-.0003	.2386	-.0056	.0431	-.0003	21.10	.0003
#3	-.0000	.2241	-.0089	.0427	-.0002	21.29	.0001
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Low	IC Pass	IC Low
High	30.00	1400.	60.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Elem	Co	Cr	Cu	Fe	K	Li	Mg

Elem	Na	Ni	Pb	Sb	Se	Sn	Sr
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0010	.0012	-.0026	.0500	2.229	.0208	1.079
SDev	.0003	.0008	.0003	.0120	.020	.0002	.032
RSD	30.08	18.35	11.40	23.91	.9031	1.089	.7729
#1	-.0010	.0050	-.0023	.0408	2.241	.0208	1.050
#2	-.0007	.0031	-.0029	.0456	2.208	.0205	1.043
#3	-.0013	.0044	-.0025	.0635	2.241	.0209	1.092

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rrors	IC Low	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
igh	30.00	60.00	60.00	100.0	30.00	9.000	1100.
ow	.0010	.0020	.0020	.0100	.1000	.0050	.0080

lem	Mn	Mo	Na	Ni	220371	220372	Sb
n	ppm	ppm	ppm	ppm			ppm
v	1.0008	1-.0004	13.96	1.0012	-.0021	.0100	1-.0048
Dev	.0001	.0016	.09	.0016	.0042	.0039	.0060
RSD	14.95	413.2	.6645	136.5	195.2	39.26	130.7
1	1.0007	1.0005	14.05	1.0020	.0012	.0055	1-.0011
2	1.0008	1-.0022	13.87	1-.0007	-.0068	.0120	1-.0011
3	1.0008	1.0005	13.95	1.0022	-.0007	.0127	1-.0115

rrors	IC Low	IC Low	IC Pass	IC Low	NOCHECK	NOCHECK	IC Low
igh	30.00	60.00	200.0	30.00			60.00
ow	.0020	.0020	.2000	.0050			.0040

lem	196071	196072	Sn	Tl	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vge	-.0046	.0309	4.573	1-.0151	.0090	1.0025	.0060
Dev	.0064	.0098	.775	.0077	.0000	.0012	.0021
RSD	139.3	31.62	16.94	51.14	.1493	48.46	34.80
1	-.0039	.0212	5.349	1-.0235	.0090	1.0011	.0041
2	-.0113	.0407	4.570	1-.0085	.0090	1.0032	.0057
3	.0014	.0307	3.799	1-.0132	.0089	1.0032	.0082

rrors	NOCHECK	NOCHECK	IC Pass	IC Low	IC Pass	IC Low	IC Pass
igh			50.00	60.00	220.0	50.00	30.00
ow			.0030	.0080	.0030	.0050	.0030

lem	Se
nits	ppm
vge	.0194
Dev	.0055
RSD	28.58
1	.0131
2	.0237
3	.0213

rrors	IC Pass
igh	60.00
ow	.0040

tStd	1	2	3	4	5	6	7

	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
lem	Y	--	--	--	--	--	--
ayleh	380.083	--	--	--	--	--	--
vge	23989	--	--	--	--	--	--
Dev	78.43681	--	--	--	--	--	--
RSD	.3286183	--	--	--	--	--	--
	23807						

		--	--	--	--	--	--
#3	23929	--	--	--	--	--	--

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ethod: NOAIKW Sample Name: 8681 Operator: JC
un Time: 09/30/98 15:54:41
omment: M8955 Ag R#0372
ode: CONC Corr. Factor: 1

-1	Ag	Al	As	Ba	Be	Ca	Cd
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	1-.0002	.1697	1-.0130	.0415	1-.0001	20.55	1-.0002
Dev	.0004	.0099	.0102	.0006	.0003	34	.0007
RSD	160.1	5.828	78.39	1.430	301.5	1.623	358.7
#1	1-.0008	.1729	1-.0143	.0450	1-.0004	20.77	1.0001
#2	1.0002	.1775	1-.0022	.0448	1-.0002	20.72	1.0004
#3	1-.0001	.1588	1-.0225	.0438	1.0002	20.17	1-.0011
rrors	IC Low	IC Pass	IC Low	IC Pass	IC Low	IC Pass	IC Low
igh	30.00	1400.	60.00	27.00	30.00	1400.	15.00
ow	.0005	.1000	.0100	.0050	.0010	.0500	.0010

lem	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	1-.0014	.0050	1-.0025	.0259	1.841	.0245	4.549
Dev	.0006	.0006	.0006	.0047	.033	.0007	.093
RSD	46.75	11.30	22.54	18.14	1.799	2.912	2.038
1	1-.0010	.0056	1-.0020	.0230	1.859	.0248	4.580
2	1-.0021	.0044	1-.0031	.0234	1.867	.0250	4.622
3	1-.0009	.0051	1-.0023	.0313	1.806	.0236	4.444
rr	IC Low	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
ig	30.00	60.00	60.00	400.0	30.00	9.000	1400
ow	.0010	.0020	.0020	.0100	.1000	.0050	.0080

lem	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
nits	ppm	ppm	ppm	ppm			ppm
vge	1.0007	1-.0004	12.81	1.0014	.0047	.0074	.0058
Dev	.0002	.0008	.34	.0020	.0020	.0044	.0079
RSD	24.28	243.0	2.624	143.3	43.18	59.17	138.9
1	1.0006	1-.0004	12.99	1.0005	.0050	.0023	.0028
2	1.0009	1-.0013	13.03	1.0037	.0064	.0097	1-.0029
3	1.0007	1.0005	12.43	1.0000	.0025	.0101	.0128
rrors	IC Low	IC Low	IC Pass	IC Low	NOCHECK	NOCHECK	IC Pass
igh	30.00	60.00	200.0	30.00			60.00
ow	.0020	.0020	.2000	.0050			.0040

el	1960/1	1960/2	Sn	Tl	V	Zn	Zr
nits			ppm	ppm	ppm	ppm	ppm
ge	.0115	.0081	4.657	1-.0119	.0062	.0081	.0085
ev	.0226	.0039	1.747	.0125	.0001	.0013	.0028
SD	201.8	48.28	37.51	105.3	1.438	16.31	32.95
	.0011	.0040	8.828	1-.0112	.0062	.0072	.0099

=3	-.0050	.0112	3.302	1.0002	.0061	.0073	.0076
rrors	NOCHECK	NOCHECK	IC Pass	IC Low	IC Pass	IC Pass	IC Pass
igh			50.00	80.00	220.0	50.00	30.00
ow			.0030	.0080	.0030	.0050	.0030

e	Se
r	ppm
vg	.0098
SDev	.0088
RSD	90.37
=1	1.0023
=2	.0198
=3	.0061

rrors	IC Pass
igh	80.00
ow	.0040

atStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
tem	\	--	--	--	--	--	--
axlen	380.083	--	--	--	--	--	--
vge	23827	--	--	--	--	--	--
Dev	349.0420	--	--	--	--	--	--
RSD	1.464922	--	--	--	--	--	--
1	23748	--	--	--	--	--	--
2	23523	--	--	--	--	--	--
3	24208	--	--	--	--	--	--

NOAIKW Sample Name: 8682 Operator: JC
e: 09/30/98 15:59:49
mment: M8855 Ag R#0372
de: CONC Corr. Factor: 1

tem	Ag	Al	As	Ba	Be	Ca	Cd
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	1.0001	1.0965	1-.0037	.0274	1-.0000	17.31	1.0001
Dev	.0005	.0101	.0164	.0002	.0001	.15	.0001
RSD	679.1	10.11	447.0	.5824	1690.	.8776	12.98
1	1-.0000	1.0921	1-.0192	.0273	1-.0001	17.12	1.0001
2	1-.0008	.1081	.0135	.0278	1.0001	17.14	1.0001
3	1.0001	1.0894	1-.0053	.0274	1.0000	17.38	1.0001
rrors	IC Low	IC Low	IC Low	IC Pass	IC Low	IC Pass	IC Low

igh	30.00	1400	60.00	27.00	30.00	1400.	15.00
ow	.0005	.1000	.0100	.0050	.0010	.0500	.0010

tem	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	1.0000	.0048	1-.0019	.0282	1.593	.0200	1.335
Dev	.0003	.0004	.0005	.0070	.031	.0003	.026
RSD	.3507	7.815	25.88	24.98	1.932	1.733	.5958

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=1	1.0003	.0044	1-.0013	.0360	1.564	.0198	1.315
=2	1.0000	.0051	1-.0022	.0222	1.625	.0204	1.364
=3	1-.0003	.0047	1-.0020	.0265	1.591	.0198	1.325
nnors	LC Low	LC Pass	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
igh	30.00	60.00	60.00	100.0	30.00	9.000	1400.
ow	.0010	.0020	.0020	.0100	.1000	.0050	.0080
lem	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
nits	ppm	ppm	ppm	ppm			ppm
vge	1.0002	1-.0000	12.15	1-.0003	.0032	.0104	1-.0056
Dev	.0000	.0014	.19	.0010	.0050	.0052	.0080
RSD	3.519	8873.	1.555	355.5	157.5	50.24	108.8
=1	1.0002	1.0015	12.03	1-.0002	.0085	.0158	1.0008
=2	1.0002	1-.0012	12.37	1-.0013	.0025	.0101	1-.0114
=3	1.0002	1-.0003	12.06	1.0007	-.0015	.0053	1-.0082
nnors	LC Low	LC Low	LC Pass	LC Low	NOCHECK	NOCHECK	LC Low
igh	30.00	60.00	200.0	30.00			60.00
ow	.0030	.0020	.2000	.0050			.0040
lem	196071	196072	Sn	Tl	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vge	-.0238	.0213	1.684	1-.0247	.0095	.0080	.0080
Dev	.0180	.0121	.536	.0303	.0001	.0024	.0051
RSD	75.52	56.84	31.80	122.8	.8435	30.46	64.11
1	-.0412	.0286	2.126	.0102	.0096	.0094	.0133
2	-.0103	.0071	1.823	1-.0399	.0095	.0093	.0076
=3	-.0189	.0280	1.093	1-.0111	.0094	.0052	.0031
nnors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
igh			50.00	60.00	220.0	50.00	30.00
ow			.0030	.0080	.0030	.0050	.0030
lem	Se						
nits	ppm						
vge	.0086						
Dev	.0060						
RSD	90.51						
1	.0047						
=2	1.0018						
=3	.0134						
nnors	LC Pass						
igh	80.00						

ow .0010

ntSta	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
lem	Y	--	--	--	--	--	--
ovlap	380.083	--	--	--	--	--	--
vge	21189	--	--	--	--	--	--
Dev	163.4085	--	--	--	--	--	-

		--	--	--	--	--	--
#1	21029	--	--	--	--	--	--
#2	21212	--	--	--	--	--	--
#3	21355	--	--	--	--	--	--

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thod: NOAIKW Sample Name: 84173-8700 Operator: JC
te: 09/30/98 16:04:57
m t: M8955 Ag R#0372
de: CONC Corr. Factor: 1

Item	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1-.0001	.1397	1-.0018	1.0029	1.0001	.0944	1-.0000
Dev	.0002	.0051	.0061	.0001	.0001	.0012	.0001
RSD	104.8	3.621	337.5	2.479	60.23	1.300	1097.
#1	1-.0001	.1453	1.0032	1.0028	1.0001	.0952	1.0001
#2	1-.0003	.1382	1-.0085	1.0029	1.0000	.0950	1.0001
#3	1.0002	.1356	1-.0001	1.0029	1.0002	.0930	1-.0002
Errors	IC Low	IC Pass	IC Low	IC Low	IC Low	IC Pass	IC Low
High	30.00	1400.	60.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Item	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1-.0007	1.0001	1-.0011	.0265	1.0882	1.0016	.0140
Dev	.0005	.0002	.0002	.0025	.0051	.0000	.0011
RSD	71.97	237.8	17.23	9.458	5.777	1.918	81.78
#1	1-.0003	1.0003	1-.0013	.0251	1.0813	1.0016	.0106
#2	1-.0005	1-.0000	1-.0012	.0294	1.0823	1.0016	.0123
#3	1-.0012	1-.0000	1-.0009	.0251	1.0810	1.0016	.0190
Errors	IC Low	IC Low	IC Low	IC Pass	IC Low	IC Low	IC Pass
High	30.00	60.00	60.00	400.0	30.00	8.000	1400.
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Item	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	1.0002	1-.0009	.8140	1.0010	.0074	.0076	1.0023
Dev	.0001	.0023	.0260	.0024	.0018	.0081	.0059
RSD	36.52	248.0	3.190	238.5	24.62	106.6	253.1
#1	1.0002	1.0008	.7900	1.0020	.0061	.0170	.0091
#2	1.0002	1-.0001	.8415	1.0027	.0067	.0029	1-.0011
#3	1.0001	1-.0036	.8104	1-.0017	.0095	.0029	1-.0011

Errors	IC Low	IC Low	IC Pass	IC Low	NOCHECK	NOCHECK	IC Low
High	30.00	60.00	200.0	30.00			60.00
Low	.0030	.0020	.2000	.0050			.0040

Item	196071	196072	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	1-.0009	.0146	.8704	1-.0145	1-.0000	.0078	.0078
Dev	.0078	.0058	.6182	.0081	.0000	.0021	.0050

000942

[illegible]	525.1	38.47	77.30	55.91	944.5	30.14	66.73
1	.0058	.0147	.4543	1-.0205	1.0000	.0092	.0133
2	-.0095	.0202	.2952	1-.0053	1.0000	.0092	.0042
3	.0008	.0090	1.262	1-.0177	1-.0000	.0051	.0051
rrors	NOCHECK	NOCHECK	IC Pass	IC Low	IC Low	IC Pass	IC Pass
i			50.00	80.00	220.0	50.00	30.00
ow			.0030	.0080	.0030	.0050	.0030

lem	Se
nits	ppm
vge	.0098
Dev	.0029
RSD	29.22
1	.0121
2	.0106
3	.0088
rrors	IC Pass
igh	60.00
ow	.0040

atStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
lem	Y	--	--	--	--	--	--
avlen	360.063	--	--	--	--	--	--
vge	24513	--	--	--	--	--	--
Dev	56.87120	--	--	--	--	--	--
RSD	.2320074	--	--	--	--	--	--
1	24417	--	--	--	--	--	--
2	24515	--	--	--	--	--	--
3	24546	--	--	--	--	--	--

---

thod: NOAIKW Sample Name: CCV Operator: JC
Time: 09/30/98 16:11:20
ment: M8955 Ag R#0372
CONC Corr. Factor: 1

lem	Ag	Al	As	Ba	Be	Ca	Cd
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	1.015	9.548	1.001	1.033	1.055	10.18	1.019
Dev	.025	.334	.026	.021	.028	.24	.013
RSD	2.457	3.503	2.584	1.991	2.616	2.345	1.271
	.9932	9.336	.9765	1.010	1.035	10.03	1.010
	1.042	9.934	.9992	1.050	1.087	10.42	1.034

	1.010	9.376	1.028	1.039	1.044	10.01	1.014
rrors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
igh	1.000	10.00	1.000	1.000	1.000	10.00	1.000
ange	10.00	10.00	10.00	10.00	10.00	10.00	10.00
lem	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm

					Q.0113	Q.0016	1.018
SDev	.019	.031	.028	.029	.0080	.0000	.038
%RSD	1.836	3.073	2.713	2.811	71.18	2.445	3.521
#1	1.005	.9835	.9913	.9948	Q.0078	Q.0016	.9838
#2	1.043	1.041	1.047	1.051	Q.0056	Q.0015	1.058
#3	1.024	1.000*	1.020	1.030	Q.0204	Q.0016	1.006
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass
Value	1.000	1.000	1.000	1.000	10.00	10.00	1.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Item	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	1.034	.9975	10.23	1.004	.9951	.9877	1.044
SDev	.029	.0293	.31	.021	.0159	.0031	.027
%RSD	2.776	2.935	3.004	2.141	1.599	.3145	2.582
#1	1.003	.9807	9.937	.9940	.9780	.9858	1.023
#2	1.060	1.031	10.55	1.029	1.009	.9880	1.074
#3	1.039	.9804	10.21	.9894	.9979	.9913	1.035
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK
Value	1.000	1.000	10.00	1.000			
Range	10.00	10.00	10.00	10.00			

Item	1960/1	1960/2	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.9913	1.018	Q4.484	.9732	1.018	1.028	.9902
SDev	.0276	.032	1.799	.0298	.033	.018	.0060
%RSD	2.779	3.164	40.12	4.092	3.215	1.783	.6081
#1	.9632	1.044	Q3.394	.9477	.9885	1.020	.9832
#2	1.018	1.028	Q6.560	1.019	1.053	1.057	.9938
#3	.9925	.9821	Q3.498	.9527	1.013	1.036	.9935
Errors	NOCHECK	NOCHECK	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value			1.000	1.000	1.000	1.000	1.000
Range			10.00	10.00	10.00	10.00	10.00

Item	Se
Units	ppm
Avge	1.009
SDev	.021
%RSD	2.051
#1	1.018
#2	1.025
#3	.9859

Errors	QC Pass
Value	1.000
Range	10.00

CntStd	1	2	3	4	5	6	7
Code	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Item	V	--	--	--	--	--	--

000944

			--	--	--	--	--
Avge	23855	--	--	--	--	--	--
SDev	155.0212	--	--	--	--	--	--
%RSD	1.922548	--	--	--	--	--	--
#1	24158	--	--	--	--	--	--
#2	23267	--	--	--	--	--	--
#3	23543	--	--	--	--	--	--

Method: NOAKW Sample Name: CCB Operator: JC
Run Time: 09/30/98 18:18:28
Comment: M8955 Ag R#0372
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0004	.0189	B-.0079	.0008	B.0007	.0128	B.0004
SDev	.0004	.0087	.0126	.0002	.0004	.0006	.0004
%RSD	92.26	46.34	159.2	27.23	56.28	5.095	117.1
#1	.0007	.0247	B.0066	.0010	B.0011	.0132	B.0008
#2	.0006	.0088	B-.0160	.0007	B.0005	.0131	-.0001
#3	-.0000	.0231	B-.0143	.0006	B.0004	.0120	B.0004
Errors	IC Pass	IC Pass	IC Low	IC Pass	IC High	IC Pass	IC High
High	.0007	.1000	.0040	.0020	.0002	.1000	.0003
Low	-.0007	-.1000	-.0040	-.0020	-.0002	-.1000	-.0003

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.0009	B-.0018	.0093	.0000	.0015	.0058
SDev	.0007	.0002	.0001	.0069	.0114	.0000	.0030
%RSD	179.1	25.89	6.440	74.85	35260.	.5329	52.98
#1	.0009	.0007	B-.0017	.0077	.0001	.0015	.0038
#2	.0008	B.0011	B-.0019	.0169	.0114	.0015	B.0091
#3	-.0004	.0007	B-.0017	.0033	-.0114	.0015	.0039
Errors	IC Pass	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
High	.0010	.0010	.0010	.0200	.1000	.0050	.0080
Low	-.0010	-.0010	-.0010	-.0200	-.1000	-.0050	-.0080

Elem	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.0009	.0018	.0073	-.0002	.0053	.0039	-.0005
SDev	.0002	.0009	.0016	.0004	.0043	.0016	.0066
%RSD	18.80	51.80	21.34	192.0	82.74	40.98	1370
	.0010	.0018	.0091	-.0002	.0033	.0023	B.0047

	.0007	.0009	.0067	-.0007	.0022	.0055	.0074
	.0009	B.0027	.0062	.0002	.0102	.0039	B-.0080
Errors	IC Pass	IC Pass	IC Pass	IC Pass	NOCHECK	NOCHECK	IC Pass
Sb	.0020	.0020	.2000	.0050			.0040
	-.0020	-.0020	-.2000	-.0050			-.0040

Tm	196071	196072	Sn	Ti	V	Zn

Units			ppm	ppm	ppm	ppm	ppm
Avge	.0018	.0103	2.181	.0022	.0010	.0025	H.0041
SDev	.0072	.0068	.715	.0098	.0004	.0012	.0017
%RSD	400.9	65.80	32.80	440.3	40.83	48.42	38.95
#1	.0102	.0097	2.941	H.0134	.0014	.0032	.0028
#2	-.0023	.0039	1.520	-.0046	.0007	.0011	H.0041
#3	-.0024	.0175	2.082	-.0021	.0008	.0032	H.0080
Errors	NOCHECK	NOCHECK	NOCHECK	IC Pass	IC Pass	IC Pass	IC High
High				.0080	.0030	.0050	.0030
Low				-.0080	-.0030	-.0050	-.0030

Elem	Se
Units	ppm
Avge	H.0078
SDev	.0049
%RSD	63.02
#1	H.0102
#2	.0022
#3	H.0112
Errors	IC High
High	.0040
Low	-.0040

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	360.063	--	--	--	--	--	--
Avge	23812	--	--	--	--	--	--
SD	39.55165	--	--	--	--	--	--
%R	.1660973	--	--	--	--	--	--
#1	23853	--	--	--	--	--	--
#2	23810	--	--	--	--	--	--
#3	23771	--	--	--	--	--	--

R# 0373 RR's
84492
84464

...thod: XOAIKW Standard: BLANK
...n Time: 10/01/98 09:08:00

Item	Ag	Al	As	Ba	Be	Ca	Cd
Avge	-.0002	.0013	-.0002	.0000	-.0071	.0000	-.0019
Dev	.0002	.0001	.0000	.0001	.0000	.0001	.0000
RSD	98.78	2.199	20.23	173.2	3038	1-8.1	1.479
#1	-.0002	.0012	-.0002	.0000	-.0071	-.0000	-.0019
#2	.0001	.0014	-.0002	.0000	-.0071	.0000	-.0018
#3	.0000	.0013	-.0003	.0001	-.0071	.0001	-.0019

Item	Cd	Co	Cr	Cu	Fe	K	Li
Avge	.0005	-.0007	-.0000	.0012	.0003	.0061	-.0005
Dev	.0001	.0001	.0001	.0001	.0000	.0012	.0002
RSD	13.32	22.58	819.5	9.942	17.17	20.08	81.67
#1	.0005	-.0008	-.0000	.0012	.0002	.0047	-.0005
#2	.0005	-.0006	-.0001	.0013	.0002	.0065	-.0007
#3	.0004	-.0005	.0001	.0011	.0003	.0071	-.0002

Item	Mg	Mn	Mo	Na	Ni	220371	220372
Avge	-.0000	.0001	.0001	-.0010	-.0003	.0024	.0004
Dev	.0000	.0000	.0000	.0007	.0001	.0016	.0002
RSD	99.99	24.58	49.92	71.79	28.16	68.41	77.00
#1	-.0001	.0001	.0000	-.0016	-.0003	.0016	.0005
#2	.0000	.0001	.0001	-.0009	-.0002	.0012	.0005
#3	-.0000	.0001	.0001	-.0003	-.0004	.0013	.0000

Item	Sb	196071	196072	Sn	Ti	V	Zn
Avge	-.0001	-.0010	.0006	.0032	-.0012	.0000	.0000
Dev	.0001	.0002	.0003	.0001	.0002	.0000	.0000
RSD	100.2	22.88	40.12	2.307	13.08	99.82	.0000
#1	-.0001	-.0007	.0004	.0033	-.0013	.0000	.0000
#2	-.0002	-.0012	.0009	.0032	-.0010	.0000	.0000
#3	.0000	-.0011	.0006	.0032	-.0012	.0001	.0000

Item	Pb
Avge	.0002
Dev	.0000
RSD	.0038
#1	.0003
#2	.0002
#3	.0002

...tSta	1	2	3	4	5	6	7
...e	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
...e	V	--	--	--	--	--	--
...ulat	280.092	--	--	--	--	--	-
...ge	25181	--	--	--	--	--	--
...Dev	77.[illegible]	--	--	--	--	--	--
...SD	[illegible]	--	--	--	--	--	--

000947

#2	25372	--	--	--	--	--	--
#3	25509	--	--	--	--	--	--

Method: NOAIKW Standard: STD1
Run Time: 10/01/98 09:13:19

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Avge	.1168	.0141	.0120	.7923	.2754	.0121	.0208
SDev	.0011	.0017	.0003	.0112	.0025	.0005	.0001
%RSD	3.267	11.80	2.579	1.420	.9988	3.969	1.715
#1	.1175	.0162	.0120	.8053	.2772	.0127	.0212
#2	.1153	.0139	.0122	.7853	.2763	.0118	.0208
#3	.1178	.0129	.0118	.7852	.2725	.0120	.0206

Elem	Cd	Co	Cr	Cu	Fe	K	Li
Avge	.2541	.0681	.1115	.2169	.0055	.0892	7.790
SDev	.0050	.0011	.0008	.0010	.0001	.0019	.197
%RSD	1.980	1.712	.7533	.4815	2.205	2.095	2.521
#1	.2589	.0673	.1120	.2181	.0056	.0909	8.018
#2	.2512	.0651	.1120	.2161	.0055	.0872	7.854
#3	.2512	.0661	.1106	.2162	.0054	.0894	7.701

Elem	Mg	Mn	Mo	Na	Ni	220371	220372
Avge	.0124	.1361	.0240	.2859	.0964	.1811	.0280
SDev	.0002	.0020	.0007	.0069	.0018	.0019	.0008
%RSD	1.855	1.459	3.077	2.412	1.883	1.048	2.961
#1	.0126	.1381	.0248	.2939	.0981	.1832	.0278
#2	.0124	.1342	.0235	.2823	.0960	.1795	.0281
#3	.0121	.1360	.0238	.2816	.0948	.1807	.0281

Elem	Sb	196071	196072	Sn	Tl	V	Zn
Avge	.0116	.0100	.0116	.0033	.0071	.0322	.0107
SDev	.0001	.0005	.0003	.0002	.0002	.0003	.0003
%RSD	1.296	4.688	2.723	4.828	3.329	.8657	2.840
#1	.0118	.0105	.0119	.0032	.0072	.0325	.0110
#2	.0116	.0097	.0112	.0035	.0068	.0322	.0104
#3	.0115	.0097	.0116	.0032	.0072	.0320	.0107

Elem	Pb
Avge	.0001
SDev	.0000
%RSD	1.282
#1	.0001
#2	.0001
#3	.0001

Std	1	2	3	4	5	6	7
Elem	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	A	--	--	--	--	--	--
					--	--	--

000948

Dev	318.7187	--	--	--	--	--	--
%RSD	1.272864	--	--	--	--	--	--
#1	24873	--	--	--	--	--	--
#2	25253	--	--	--	--	--	--
#3	25192	--	--	--	--	--	--

Method: M04IKW Standard: STD2
Run Time: 10/01/98 09:18:39

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Avge	1.881	.1819	.0497	3.140	1.139	.2167	.4067
SDev	.017	.0002	.0005	.020	.004	.0011	.0005
%RSD	1.008	.1428	.9653	.6301	.3143	.4950	.1222
#1	1.862	.1820	.0497	3.129	1.134	.2171	.4081
#2	1.888	.1821	.0493	3.129	1.141	.2155	.4088
#3	1.895	.1817	.0502	3.163	1.141	.2175	.4071

Elem	Cd	Co	Cr	Cu	Fe	K	Li
Avge	1.018	.2890	.4515	.8787	.0952	.4295	41.22
SDev	.007	.0022	.0038	.0104	.0007	.0019	.05
%RSD	.6741	.8020	.8471	1.184	.6962	.4407	.1322
#1	1.022	.2889	.4471	.8818	.0952	.4287	41.28
#2	1.010	.2885	.4521	.8815	.0945	.4318	41.17
#3	1.018	.2905	.4549	.8838	.0959	.4281	41.27

Elem	Mg	Mn	Mo	Na	Ni	220371	220372
Avge	.2341	.5422	.0941	6.040	.3839	.7446	.1086
SDev	.0027	.0054	.0007	.009	.0014	.0068	.0007
%RSD	1.130	.9921	.7501	.1514	.3689	.9178	.6735
#1	.2313	.5382	.0939	6.050	.3850	.7446	.1095
#2	.2313	.5402	.0934	6.038	.3823	.7377	.1081
#3	.2368	.5483	.0948	6.032	.3844	.7514	.1084

Elem	Sb	196071	196072	Se	Tl	V	Zn
Avge	.0177	.0436	.0438	.0036	.0295	.8112	.1092
SDev	.0009	.0003	.0000	.0001	.0001	.0062	.0020
%RSD	1.878	.7192	.0856	2.595	.3507	.7620	.9819
#1	.0187	.0437	.0438	.0035	.0296	.8027	.2095
#2	.0181	.0432	.0437	.0037	.0294	.8135	.1088
#3	.0181	.0438	.0439	.0038	.0298	.8190	.1093

Elem	Pb
Avge	.0001
SDev	.0000
%RSD	8.238
#1	.0001
#2	.0001
#3	.0001

IntStd	1	2	3	4	5	6	7

Node	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	\	--	--	--	--	--	--
Devlen	380.083	--	--	--	--	--	--
Avge	25150	--	--	--	--	--	--
SDev	109.2200	--	--	--	--	--	--
%RSD	.4342717	--	--	--	--	--	--
#1	25108	--	--	--	--	--	--
#2	25227	--	--	--	--	--	--
#3	25025	--	--	--	--	--	--

Method: NOAIKW Standard: STD3
Run Time: 10/01/98 09:23:59

Elem	Ag	Al	As	Ba	Be	Ca	Ca
Avge	7.679	.7822	.2319	14.01	4.969	1.048	1.928
SDev	.079	.0113	.0020	.03	.051	.001	.014
%RSD	1.022	1.450	.8561	.2277	1.026	.3842	.7495
#1	7.588	.7745	.2339	14.03	4.914	1.045	1.915
#2	7.717	.7953	.2300	13.97	5.015	1.052	1.944
#3	7.731	.7770	.2317	14.03	4.977	1.048	1.926

Elem	Cd	Co	Cr	Cu	Fe	K	Li
Avge	1.583	1.234	2.030	1.032	.1415	2.801	288.5
SDev	.009	.008	.028	.025	.0018	.022	3.7
%RSD	.2058	.6482	1.278	.8752	1.030	.8711	1.284
#1	1.592	1.228	2.000	1.001	.1394	2.827	291.5
#2	1.573	1.234	2.039	1.055	.1459	2.805	288.8
#3	1.583	1.239	2.050	1.039	.1483	2.782	284.1

Elem	Mg	Mn	Mo	Na	Ni	2203/1	2203/2
Avge	1.113	2.381	.4488	29.74	1.738	3.424	.5133
SDev	.018	.026	.0015	.41	.002	.009	.0052
%RSD	1.635	1.098	.3358	1.391	.1218	.2752	1.008
#1	1.095	2.357	.4472	30.07	1.740	3.414	.5187
#2	1.120	2.385	.4503	29.87	1.738	3.433	.5083
#3	1.124	2.410	.4488	29.28	1.740	3.425	.5130

Elem	Sb	1960/1	1960/2	Sn	Tl	V	Zn
Avge	.2318	.2091	.2052	.0012	.1414	2.875	.8971
SDev	.0021	.0032	.0003	.0001	.0028	.011	.0025
%RSD	.9212	1.509	.1410	1.788	1.779	1.188	.2885
#1	.2305	.2052	.2052	.0011	.1370	2.880	.8975
#2	.2330	.2108	.2050	.0012	.1419	2.888	.8945
#3	.2322	.2118	.2054	.0012	.1414	2.877	.8993

Elem	Pb
Avge	.0001
SDev	.0000
%RSD	5.583

000050

Standardization Rpt. Thu 10-01-98 09:29:10 AM page 5

#3 0001

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	1	--	--	--	--	--	--
Wavelen	280.000	--	--	--	--	--	--
Avge	21482	--	--	--	--	--	--
SDev	113.8188	--	--	--	--	--	--
%RSD	.5291881	--	--	--	--	--	--
#1	21808	--	--	--	--	--	--
#2	21808	--	--	--	--	--	--
#3	21172	--	--	--	--	--	--

Method: NOALKW Slope = Conc(SUB)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Mg	279.068	Multiple	Standards	1.22932	.000078	10/01/98 09:23:59
Al	308.215	Multiple	Standards	60.2867	-.260528	10/01/98 09:23:59
As	189.042	Multiple	Standards	11.4052	.009141	10/01/98 09:23:59
Ba	493.409	Multiple	Standards	.658732	-.000265	10/01/98 09:23:59
Be	313.042	Multiple	Standards	1.83483	.013394	10/01/98 09:23:59
Ca	317.933	Multiple	Standards	24.0691	.042425	10/01/98 09:23:59
Cd	370.603	Multiple	Standards	53.2361	-.002187	10/01/98 09:23:59
Co	228.502	Multiple	Standards	2.03639	-.001123	10/01/98 09:23:59
Cr	228.616	Multiple	Standards	7.85731	.001872	10/01/98 09:23:59
Cu	267.716	Multiple	Standards	1.59826	-.000102	10/01/98 09:23:59
Fe	271.751	Multiple	Standards	2.25291	-.002881	10/01/98 09:23:59
K	271.441	Multiple	Standards	108.105	-.028559	10/01/98 09:23:59
Li	670.491	Multiple	Standards	1.71817	-.027873	10/01/98 09:23:59
Mn	870.781	Multiple	Standards	.018083	.001398	10/01/98 09:23:59
Mo	279.079	Multiple	Standards	11.9739	.001300	10/01/98 09:23:59
Na	257.610	Multiple	Standards	3.83190	-.000597	10/01/98 09:23:59
Ni	202.030	Multiple	Standards	21.1923	-.001822	10/01/98 09:23:59
Pb	588.995	Multiple	Standards	1.69513	.001767	10/01/98 09:23:59
Sb	231.601	Multiple	Standards	5.30422	.001339	10/01/98 09:23:59
Se/1	220.351	Multiple	Standards	2.80817	-.008682	10/01/98 09:23:59
Se/2	196.090	Multiple	Standards	18.8972	-.008728	10/01/98 09:23:59
Sn	208.838	Multiple	Standards	12.3190	.002333	10/01/98 09:23:59
Sr/1	196.021	Multiple	Standards	16.0294	.015752	10/01/98 09:23:59
Sr/2	196.022	Multiple	Standards	15.8366	-.030189	10/01/98 09:23:59
Ti	189.989	Multiple	Standards	7750.23	-25.1823	10/01/98 09:23:59
V	190.861	Multiple	Standards	60.2727	.070927	10/01/98 09:23:59
Zn	202.102	Multiple	Standards	16.2985	-.000913	10/01/98 09:23:59
Zr	208.200	Multiple	Standards	50.6872	-.000410	10/01/98 09:23:59
Y	220.353	Multiple	Standards	.001766	-.000001	10/01/98 09:23:59
Hg	196.028	NONE	NONE	1.00000	.000000	*NOT STANDARDIZED

Method NOALKW

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Deviation Concentration
Mg	279.068	BLANK	.000000	-.000117	.000117
		STD1	.500000	.512094	.012094
		STD2	2.00000	2.06520	.06520
		STD3	10.0000	9.12197	

...lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
...	202.215	BLANK	.000000	-.000818	.000818
		STD1	.500000	.601821	-.101821
		STD2	10.0000	9.50197	.498034
		STD3	50.0000	46.8977	3.10228

...rlcoef: 1.00000

...lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
...	189.042	BLANK	.000000	-.000072	.000072
		STD1	.500000	.501882	-.001882
		STD2	2.00000	2.08820	-.088204
		STD3	10.0000	9.61051	.389488

...rlcoef: 0.99982

...lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
...	193.409	BLANK	.000000	-.000239	.000239
		STD1	.500000	.521832	-.021832
		STD2	2.00000	2.08844	-.088435
		STD3	10.0000	9.22819	.771811

...rlcoef: 0.99972

...lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
...	313.042	BLANK	.000000	-.000227	.000227
		STD1	.500000	.518818	-.018818
		STD2	2.00000	2.10250	-.102503
		STD3	10.0000	9.13027	.869731

...rlcoef: 0.99955

...lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
...	317.933	BLANK	.000000	-.000132	.000132
		STD1	.500000	.512938	-.012938
		STD2	10.0000	9.83055	.169119
		STD3	50.0000	46.4531	3.51858

...rlcoef: 0.99993

...lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
...	370.802	BLANK	.000000	-.001171	.001171
		STD1	.500000	.614383	-.114383
		STD2	10.0000	11.5312	-1.53121
		STD3	100.000	55.7813	44.2187

...rlcoef: 0.99120

...lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
...	228.502	BLANK	.000000	-.000190	.000190
		STD1	.500000	.518312	-.018312
		STD2	2.00000	2.08871	-.088710
		STD3	10.0000	9.33103	.668971

...rlcoef: 0.99977

...lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
...	228.818	BLANK	.000000	-.000140	.000140
		STD1	.500000	.511364	-.011364
		STD2	2.00000	2.08441	-.084411
		STD3	10.0000	9.45178	.548217

...rlcoef: 0.99989

lement	Wavelength	Standard	known Concentration	Measured Concentration	Residual Concentration
	267.716	BLANK	.000000	-.000183	.000183
		STD1	.500000	.512810	-.012810
		STD2	2.00000	2.07610	-.075395
		STD3	10.0000	9.33508	.664917

rCoef: 0.99975

lement	Wavelength	Standard	known Concentration	Measured Concentration	Residual Concentration
	321.751	BLANK	.000000	-.000111	.000111
		STD1	.500000	.508650	-.008650
		STD2	2.00000	2.06508	-.065078
		STD3	10.0000	9.50782	.492381

rCoef: 0.99985

lement	Wavelength	Standard	known Concentration	Measured Concentration	Residual Concentration
	271.111	BLANK	.000000	-.000258	.000258
		STD1	.500000	.585908	-.085908
		STD2	10.0000	10.2882	-.288298
		STD3	50.0000	48.0277	1.97231

rCoef: 0.99990

lement	Wavelength	Standard	known Concentration	Measured Concentration	Residual Concentration
	766.491	BLANK	.000000	.001039	-.001039
		STD1	.500000	.392893	.107107
		STD2	2.00000	1.99851	.001487
		STD3	10.0000	12.2598	-2.25985

rCoef: 0.99836

lement	Wavelength	Standard	known Concentration	Measured Concentration	Residual Concentration
	670.784	BLANK	.000000	.001377	-.001377
		STD1	.500000	.360282	.139718
		STD2	2.00000	1.90085	.099317
		STD3	10.0000	13.2917	-3.29169

rCoef: 0.99857

lement	Wavelength	Standard	known Concentration	Measured Concentration	Residual Concentration
	279.079	BLANK	.000000	-.000315	.000315
		STD1	.500000	.520189	-.020189
		STD2	10.0000	9.82859	.171109
		STD3	50.0000	48.7158	2.28135

rCoef: 0.99995

lement	Wavelength	Standard	known Concentration	Measured Concentration	Residual Concentration
	257.610	BLANK	.000000	-.000215	.000215
		STD1	.500000	.521283	-.021283
		STD2	2.00000	2.07879	-.078791
		STD3	10.0000	9.11191	.888091

rCoef: 0.99981

lement	Wavelength	Standard	known Concentration	Measured Concentration	Residual Concentration
	202.030	BLANK	.000000	-.000133	.000133
		STD1	.500000	.513031	-.013031
		STD2	2.00000	2.01881	-.018808
		STD3	10.0000	9.82288	.177105

rCoef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Na	589.995	BLANK	.000000	.000147	-.000147
		STD1	.500000	.488152	.012518
		STD2	10.0000	10.2400	-.239955
		STD3	50.0000	50.4155	-.415513

Corr Coef: 0.99988

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Al	231.604	BLANK	.000000	-.000208	.000208
		STD1	.500000	.518428	-.018428
		STD2	2.00000	2.06080	-.080798
		STD3	10.0000	9.32649	.673508

Corr Coef: 0.99979

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
203/1	220.351	BLANK	.000000	-.000055	.000055
		STD1	.500000	.502002	-.002002
		STD2	2.00000	2.08418	-.084183
		STD3	10.0000	9.60873	.391271

Corr Coef: 0.99985

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
P	220.353	BLANK	.000000	-.000011	.000011
		STD1	.500000	.501312	-.001312
		STD2	2.00000	2.01803	-.018032
		STD3	10.0000	9.68403	.315965

Corr Coef: 0.99991

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
[illegible]	205.838	BLANK	.000000	.000003	-.000003
		STD1	.500000	.498205	.001795
		STD2	2.00000	2.02315	-.022150
		STD3	10.0000	9.81755	.182451

Corr Coef: 0.99998

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
80/1	198.021	BLANK	.000000	-.000062	.000062
		STD1	.500000	.501279	-.001279
		STD2	2.00000	2.05107	-.051069
		STD3	10.0000	9.68364	.316369

Corr Coef: 0.99993

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
0/2	198.022	BLANK	.000000	-.000131	.000131
		STD1	.500000	.511739	-.011739
		STD2	2.00000	2.01857	-.018587
		STD3	10.0000	9.58271	[illegible]

Corr Coef: 0.99995

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
[illegible]	189.989	BLANK	.000000	.000315	-.000315
		STD1	.500000	.470558	[illegible]
		STD2	2.00000	2.87881	-.878811
		STD3	10.0000	7.19482	[illegible]

rment	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
	190.801	BLANK	.000000	-.000071	.000071
		STD1	.500000	.497858	.002142
		STD2	2.00000	1.85076	.14923
		STD3	10.0000	8.77717	1.22283

nCoef: 0.99991

ement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
	292.402	BLANK	.000000	-.000303	.000303
		STD1	.500000	.524531	-.024531
		STD2	10.0000	9.95986	.040138
		STD3	50.0000	46.8595	3.14051

nCoef: 0.99992

ement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
	206.200	BLANK	.000000	-.000410	.000410
		STD1	.500000	.540872	-.040872
		STD2	10.0000	10.0760	-.075991
		STD3	50.0000	45.4708	4.52921

nCoef: 0.99976

em t	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
	220.353	BLANK	.000000	-.000000	.000000
		STD1	.500000	.000000	.500000
		STD2	2.00000	.000000	2.00000
		STD3	10.0000	.000000	10.00000

nCoef: 0.25781

ement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
	196.026	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

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thod: NOALKW Sample Name: CHKSTD Operator:
e Time: 10/01/98 09:29:19
mment: CALIBRATION STANDARDS
le: CONC Corr. Factor: 1

tem	Ag	Al	As	Ba	Be	Ca	Cd
its	ppm	ppm	ppm	ppm	ppm	ppm	ppm
rge	9.680	Q16.12	9.719	Q9.379	Q9.263	Q17.12	Q9.100
ev	.019	.21	.089	.021	.070	.20	.117
SD	.5022	1188	.9209	.2200	.7596	.1327	1.213
	9.716	Q16.23	9.779	Q9.370	Q9.311	Q17.38	Q9.108
	9.699	Q16.38	9.763	Q9.103	Q9.225	Q16.98	Q9.186
	9.625	Q16.61	9.616	Q9.361	Q9.220	Q17.01	Q9.285
	QC Pass	QC Fail	QC Pass	QC Fail	QC Fail	QC Fail	QC Fail
	10.00	50.00	10.00	10.00	10.00	50.00	10.00
nge	5.000	5.000	5.000	5.000	5.000	5.000	5.000

em	Co	Cr	Cu	Fe	K	[illegible]	Mg
its	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	[illegible]	[illegible]	9.[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

000955

[illegible]	[illegible]	28	045	85	19	16	11

%RSD	1.579	1.352	.1652	1.777	1.535	1.219	.8575
=1	9.858	9.812	9.711	18.57	Q12.11	Q13.11	18.18
=2	9.880	Q9.156	9.703	18.11	Q12.71	Q13.62	17.90
=3	Q9.107	Q9.358	9.651	Q16.92	Q12.34	Q13.29	Q17.34
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass
Value	10.00	10.00	10.00	50.00	10.00	10.00	50.00
Range	5.000	5.000	5.000	5.000	5.000	5.000	5.000
Item	Mn	Mo	Na	Ni	220871	220872	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	Q9.791	9.777	51.07	Q9.117	9.680	9.871	10.12
SDev	.158	.107	.56	.011	.077	.129	.02
%RSD	1.898	1.097	1.103	.1259	.7985	1.308	.1818
=1	Q9.101	9.788	51.10	Q9.190	9.738	9.961	10.10
=2	Q9.313	9.878	51.61	Q9.111	9.711	9.935	10.12
=3	Q9.105	9.665	50.19	Q9.108	9.592	9.725	10.11
Errors	QC Fail	QC Pass	QC Pass	QC Fail	NOCHECK	NOCHECK	QC Pass
Value	10.00	10.00	50.00	10.00			10.00
Range	5.000	5.000	5.000	5.000			5.000
Item	186071	186072	Sn	Ti	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	9.751	9.892	9.597	9.779	18.02	Q18.01	9.809
SDev	.088	.071	.802	.118	.19	.85	.112
%RSD	1.005	.7212	8.354	1.210	1.022	1.812	1.140
=1	9.818	9.959	Q9.111	9.889	18.17	Q16.58	9.988
=2	9.799	9.901	10.17	9.901	18.09	Q18.12	9.881
=3	9.839	9.817	Q8.885	9.765	Q17.19	Q15.01	9.881
Errors	NOCHECK	NOCHECK	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass
Value			10.00	10.00	50.00	50.00	10.00
Range			5.000	5.000	5.000	5.000	5.000
Item	Se						
Units	ppm						
Avge	9.818						
SDev	.079						
%RSD	.8011						
=1	9.912						
=2	9.887						
=3	9.758						
Errors	QC Pass						
Value	10.00						
Range	5.000						

ntStd	1	2	3	4	5	6	7
Title	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Time	--	--	--	--	--	--	--

000356

Kaylen	360 083	--	--	--	--	--	--

Avge	21208	--	--	--	--	--	--
SDev	211.1258	--	--	--	--	--	--
%RSD	9932899	--	--	--	--	--	--
#1	21189	--	--	--	--	--	--
#2	21118	--	--	--	--	--	--
#3	21581	--	--	--	--	--	--

Method: NOALKW Sample Name: ICV Operator:
Run Time: 10/01/98 09:34:38
Comment: CALIBRATION STANDARDS
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.010	Q8.877	1.001	1.014	1.031	9.899	.9898
SDev	.005	.072	.022	.009	.002	.050	.0099
%RSD	.1183	.8317	2.159	.9063	.2083	.5075	.9975
#1	1.009	Q8.705	.9833	1.007	1.030	9.902	.9898
#2	1.006	Q8.731	1.025	1.011	1.031	9.947	.9802
#3	1.015	Q9.021	.9958	1.021	1.030	9.847	.9999
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.000	10.00	1.000	1.000	1.000	10.00	1.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9862	.9827	1.004	1.002	Q.0070	Q.0061	1.019
SDev	.0092	.0043	.020	.008	.0087	.0012	.017
%RSD	.9218	.4397	2.027	.7628	124.5	20.08	1.658
#1	.9872	.9870	1.027	1.009	Q.0152	Q.0075	1.029
#2	.9865	.9827	.9889	.9936	Q-.0022	Q.0054	1.011
#3	1.005	.9781	.9959	1.002	Q.0081	Q.0053	1.009
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass
Value	1.000	1.000	1.000	1.000	10.00	10.00	1.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Elem	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.9982	1.001	9.179	1.003	.8821	.9539	1.019
SDev	.0069	.006	.090	.010	.0072	.0180	.011
%RSD	.6924	.5551	.9501	.9608	7.113	1.877	1.058
#1	.9992	.9918	9.178	1.010	.8780	.9381	1.012
#2	.9881	1.005	9.389	.9915	.8801	.9583	1.019
#3	1.001	1.003	9.089	1.005	.8902	.8871	1.027
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK
Value	1.000	1.000	10.00	1.000			
Range	10.00	10.00	10.00	10.00			

000357

Units			ppm	ppm	ppm	ppm	ppm

Avge	1.008	.9810	Q1.214	.9319	1.036	1.021	.9823
SDev	.019	.0318	.385	.0182	.009	.012	.0199
%RSD	1.883	3.213	31.69	1.741	.8157	1.233	1.335
#1	1.002	.9720	.9181	.9503	1.047	1.024	.9201
#2	.9588	.9188	Q1.649	.9258	1.029	1.009	.9858
#3	1.057	.9971	1.071	.9198	1.033	1.020	.9718
Errors	NOCHECK	NOCHECK	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value			1.000	1.000	1.000	1.000	1.000
Range			10.00	10.00	10.00	10.00	10.00

Elem	Se
Units	ppm
Avge	.9781
SDev	.0358
%RSD	3.649
#1	.9591
#2	.9525
#3	1.017
Errors	QC Pass
Value	1.000
Range	10.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Errors	280.063	--	--	--	--	--	--
Avge	25388	--	--	--	--	--	--
SDev	231.8513	--	--	--	--	--	--
%RSD	.9131755	--	--	--	--	--	--
#1	25558	--	--	--	--	--	--
#2	25138	--	--	--	--	--	--
#3	25109	--	--	--	--	--	--

Method: N01LKW Sample Name: ICB Operator:
Run Time: 10/01/98 09:39:57
Comment: CALIBRATION STANDARDS
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	H.0025	.0298	.0010	H.0024	H.0028	.0213	H.0017
SDev	.0009	.0088	.0172	.0011	.0011	.0101	.0011
%RSD	36.00	22.12	1881.	18.37	40.81	47.98	62.71
1	H.0036	.0193	H.0075	H.0037	H.0041	.0233	H.0027
2	H.0022	.0373	H.0140	.0017	H.0022	.0150	H.0014
3	H.0018	.0323	L-.0185	.0018	H.0020	.0180	H.0008
Errors	LC High	LC Pass	LC Pass	LC High	LC High	LC Pass	LC High
Limit	.0007	1.000	.0010	.0020	.0002	1.000	

000956

lem	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vgr	H.0022	H.0026	H.0016	.0094	.0089	.0023	H.0201
Dev	.0010	.0013	.0013	.0127	.0080	.0003	.0042
SD	47.86	51.11	82.01	134.1	90.38	14.88	20.87
	H.0031	H.0041	H.0031	H.0271	.0010	.0027	H.0148
2	H.0016	H.0017	.0007	.0095	.0171	.0022	H.0182
3	H.0016	H.0019	.0010	-.0033	.0086	.0021	H.0195
rrors	IC High	IC High	IC High	IC Pass	IC Pass	IC Pass	IC High
igh	.0010	.0010	.0010	.0200	.1000	.0050	.0020
ow	-.0010	-.0010	-.0010	-.0200	-.1000	-.0050	-.0020

lem	Mn	Mo	Na	Ni	220371	220372	Sb
nits	ppm	ppm	ppm	ppm			ppm
vgr	.0025	H.0052	.0194	.0029	-.0027	.0043	H.0106
Dev	.0011	.0013	.0053	.0001	.0020	.0080	.0010
SD	43.55	24.88	27.06	4.181	73.26	122.5	9.212
	H.0038	H.0066	.0254	.0028	-.0044	.0118	H.0117
2	.0020	H.0041	.0175	.0030	-.0005	.0014	H.0100
3	.0018	H.0049	.0155	.0028	-.0032	.0014	H.0100
rrors	IC Pass	IC High	IC Pass	IC Pass	NOCHECK	NOCHECK	IC High
igh	.0030	.0020	.2000	.0050			.0040
ow	-.0030	-.0020	-.2000	-.0050			-.0040

lem	198071	198072	Sn	Ti	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vgr	.0000	.0041	.7905	H.0175	H.0089	H.0109	.0021
Dev	.0133	.0111	.2042	.0022	.0037	.0073	.0038
SD	500100	269.2	25.84	11.38	11.67	21.28	149.5
	.0150	.0029	1.028	H.0096	H.0132	H.0135	H.0081
	.0024	.0157	.8839	H.0180	H.0068	H.0095	.0008
	-.0171	-.0083	.6817	H.0238	H.0068	H.0095	-.0001
rrors	NOCHECK	NOCHECK	NOCHECK	IC High	IC High	IC High	IC Pass
igh				.0080	.0030	.0050	.0030
ow				-.0080	-.0030	-.0050	-.0030

lem	Sr
nits	ppm
vgr	.0031
Dev	.0112
SD	388.0
	H.0073
	H.0110
	-.0097
rrors	IC Pass
igh	.0040
ow	-.0040

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	360.073	--	--	--	--	--	--
Avge	25183	--	--	--	--	--	--
SDev	29.81810	--	--	--	--	--	--
%RSD	.1170030	--	--	--	--	--	--
#1	25151	--	--	--	--	--	--
#2	25188	--	--	--	--	--	--
#3	25210	--	--	--	--	--	--

Method: NOAISW Sample Name: ICSA Operator:
Run Time: 10/01/98 09:15:16
Comment: CALIBRATION STANDARDS
Wgt: COMP Corr Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0010	226.8	-.0202	-.0031	-.0006	231.1	.0011
SDev	.0002	3.0	.0035	.0002	.0003	1.1	.0009
%RSD	22.68	1.317	17.42	7.721	46.63	.4912	20.03
#1	.0008	223.9	-.0242	-.0028	-.0003	229.9	.0050
#2	.0008	229.8	-.0175	-.0032	-.0008	232.1	.0017
#3	.0012	226.8	-.0190	-.0033	-.0007	231.2	.0034
Errors	NOCHECK	QC Pass	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value		250.0				250.0	
Range		20.00				20.00	

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	.0328	.0081	91.90	.0117	.0021	91.6
SDev	.0007	.0002	.0004	.88	.0071	.0001	3.0
%RSD	99.91	.6831	5.513	.7141	60.59	5.918	1.217
#1	-.0001	.0341	.0086	91.41	.0046	.0022	92.3
#2	.0012	.0337	.0079	92.85	.0187	.0021	92.2
#3	.0009	.0328	.0077	91.82	.0117	.0020	91.1
Errors	NOCHECK	NOCHECK	NOCHECK	QC Pass	NOCHECK	NOCHECK	QC Pass
Value				100.0			250.0
Range				20.00			20.00

Elem	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.0333	-.0026	.0143	.0026	-.0358	.0082	.0221
SDev	.0003	.0028	.0030	.0020	.0063	.0088	.0093
%RSD	.7812	108.9	20.67	77.23	17.67	83.19	42.09
#1	.0335	-.0050	.0178	.0004	-.0426	.0087	.0130
#2	.0331	-.0032	.0134	.0030	-.0300	.0156	.0211
#3	.0330	.0005	.0119	.0044	-.0348	.0022	.0319

Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							

Range

Item	198071	198072	Sn	Ti	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.0143	-.0062	20.09	.0196	.0049	.0129	-.0085
SDev	.0319	.0223	.68	.0042	.0010	.0012	.0059
%RSD	223.6	358.6	3.390	21.20	21.27	9.483	91.77
#1	.0012	-.0313	20.86	.0190	.0060	.0143	-.0097
#2	-.0090	.0116	19.84	.0158	.0040	.0122	.0004
#3	.0507	.0010	19.56	.0241	.0047	.0121	-.0101
Errors	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK	NOCHECK
Value							

Range

Item	Se
Units	ppm
Avge	.0000
SDev	.0101
%RSD	2041
#1	-.0201
#2	.0051
#3	.0179
Errors	NOCHECK
Value	

Range

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Item	Y	--	--	--	--	--	--
Gavlen	360.062	--	--	--	--	--	--
Avge	28179	--	--	--	--	--	--
SDev	89.24311	--	--	--	--	--	--
%RSD	.3850115	--	--	--	--	--	--
#1	28241	--	--	--	--	--	--
#2	28077	--	--	--	--	--	--
#3	28220	--	--	--	--	--	--

Method: M0146 Sample Name: ICSAB Operator:
Date/Time: 10/01/98 09:50:35
Comment: CALIBRATION STANDARDS
Mode: CONC Corr. Factor: 1

	Ag	Al	As	Ba	Be	Ca	Cd
	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.082	222.5	.5057	.5177	.5154	230.2	1.004
SDev	.009	.9	.0231	.0024	.0018	.5	.008
%RSD	.7821	.3115	4.561	.4529	.3117	.2155	.8861
#1	1.074	223.1	.5254	.5198	.5139	230.0	.9981
#2	1.087	222.2	.4803	.5181	.5171	230.8	1.010

Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.000	250.0	.5000	.5000	.5000	250.0	1.000
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Elem	Cd	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.1865	.5155	.5118	91.22	Q.0149	Q.0017	241.5
SDev	.0102	.0026	.0017	.99	.0011	.0000	1
%RSD	2.051	.1972	.8591	.9777	29.63	1.897	.1923
#1	.1850	.5176	.5395	90.20	Q.0176	Q.0017	241.5
#2	.5001	.5161	.5463	91.86	Q.0173	Q.0017	241.9
#3	.5011	.5128	.5485	91.60	Q.0098	Q.0017	241.0
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass
Value	.5000	.5000	.5000	100.0	.5000	1.000	250.0
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Elem	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.5332	Q-.0017	Q1.491	.9838	.9811	1.015	.5188
SDev	.0015	.0021	.024	.0082	.0121	.013	.0199
%RSD	.2872	19.91	1.633	.8197	1.231	1.202	3.835
#1	.5280	Q-.0051	Q1.468	.9511	.9701	1.031	.5312
#2	.5348	Q-.0069	Q1.516	.9871	.9908	1.047	.5401
#3	.5361	Q-.0022	Q1.488	.9898	.9920	1.058	.5319
Errors	QC Pass	QC Fail	QC Fail	QC Pass	NOCHECK	NOCHECK	QC Pass
Value	.5000	1.000	1.000	1.000			.5000
Range	20.00	20.00	20.00	20.00			20.00
Elem	180371	180372	Sn	Ti	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.5002	.1135	Q20.79	.5298	.5005	.9826	1.025
SDev	.0310	.0099	1.09	.0099	.0017	.0147	.012
%RSD	6.205	2.239	5.229	1.869	.3396	1.199	1.156
#1	.1968	.1121	Q19.61	.5283	.4987	.9856	1.013
#2	.5322	.1140	Q20.92	.5101	.5006	.9902	1.025
#3	.4716	.1212	Q21.81	.5208	.5021	.9919	1.038
Errors	NOCHECK	NOCHECK	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value			1.000	.5000	.5000	1.000	1.000
Range			20.00	20.00	20.00	20.00	20.00
Elem	Sr						
Units	ppm						
Avge	.1002						
SDev	.0170						
%RSD	9.926						
#1	.1803						
#2	.1202						
#3	.1171						

Errors QC Pass

Value .5000
Range 20.00

IntStd	1	2	3	4	5	6	7
Mode	#Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Item	\	--	--	--	--	--	--
Wavlen	280.083	--	--	--	--	--	--
Avge	23052	--	--	--	--	--	--
Stdev	280.0519	--	--	--	--	--	--
%RSD	1.128081	--	--	--	--	--	--
#1	23351	--	--	--	--	--	--
#2	22872	--	--	--	--	--	--
#3	22938	--	--	--	--	--	--

Method: NOALKW Sample Name: CR1 Operator:
Run Time: 10/01/98 09:55:54
Comment: CALIBRATION STANDARDS
Mode: CONC Corr. Factor: 1

Item	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avg	Q-.0004	Q-.1581	Q.0026	Q-.0002	Q.0093	Q.0152	Q-.0007
Stdev	.0001	.0109	.0077	.0000	.0006	.0112	.0004
%RSD	19.17	6.927	297.9	8.162	6.301	73.26	61.40
#1	Q-.0005	Q-.1499	Q.0079	Q-.0002	Q.0091	Q.0241	Q-.0003
#2	Q-.0004	Q-.1705	Q.0062	Q-.0002	Q.0099	Q.0185	Q-.0005
#3	Q-.0005	Q-.1539	Q-.0063	Q-.0002	Q.0088	Q.0028	Q-.0011
Errors	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail
Value	.0050	.0050	.0050	.0050	.0050	.0050	.0050
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00

Item	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	Q.0008	Q.0002	Q-.0023	Q.0021	Q.0063	Q.0014	Q.0287
Stdev	.0010	.0003	.0002	.0087	.0019	.0000	.0051
%RSD	178.8	153.2	7.853	421.3	30.36	2.731	17.15
#1	Q-.0001	Q.0005	Q-.0025	Q.0118	Q.0080	Q.0013	Q.0326
#2	Q.0018	Q.0000	Q-.0023	Q-.0005	Q.0067	Q.0014	Q.0241
#3	Q.0001	Q.0000	Q-.0022	Q-.0051	.0042	Q.0014	Q.0236
Errors	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail
Value	.0050	.0050	.0050	.0050	.0050	.0050	.0050
Range	20.00	20.00	20.00	20.00	20.00	20.00	20.00

Item	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	Q-.0003	Q-.0018	Q-.0063	Q.0007	.0098	-.0007	.0016
Stdev	.0001	.0021	.0022	.0008	.0054	.0034	[illegible]
%RSD	20.92	127.7	35.54	88.85	54.39	185.8	[illegible]
#1	Q-.0000	Q-.0012	Q-.0023	Q.0012	.0129	.0037	[illegible]

000063

=3	Q- .0001	Q .0002	Q- .0072	Q .0000	.0131	- .0026	.0112

rrors	QC Fail	QC Fail	QC Fail	QC Fail	NOCHECK	NOCHECK	NOCHECK
alue	.0050	.0050	.0050	.0050			
ange	20.00	20.00	20.00	20.00			
tem	196071	196072	Sn	Ti	V	Zn	Pb
nits			ppm	ppm	ppm	ppm	ppm
vge	.0188	-.0128	Q-10.28	Q.0503	Q-.0006	Q- .0001	Q.0028
Dev	.0112	.0061	2.12	.0086	.0003	.0002	.0031
RSD	59.20	50.13	23.53	17.15	50.58	3922	125.3
=1	.0200	-.0054	Q-8.522	Q.0409	Q-.0005	Q-.0001	Q.0085
=2	.0294	-.0158	Q-13.01	Q.0523	Q-.0010	Q-.0001	Q-.0006
=3	.0072	-.0171	Q-9.281	Q.0578	Q-.0001	Q-.0001	Q.0026

rrors	NOCHECK	NOCHECK	QC Fail	QC Fail	QC Fail	QC Fail	QC Fail
alue			.0050	.0050	.0050	.0050	.0050
ange			20.00	20.00	20.00	20.00	20.00

tem	Se
nits	ppm
vg	Q-.0020
D	.0062
RSD	306.5
=1	Q.0033
=2	Q-.0005
=3	Q-.0088

rrors	QC Fail
alue	.0050
ange	20.00

ntStd	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
tem	Y	--	--	--	--	--	--
axim	280,063	--	--	--	--	--	-
vge	35511	--	--	--	--	--	--
Dev	5787.783	--	--	--	--	--	-
RSD	16.29713	--	--	--	--	--	--
=1	32138	--	--	--	--	--	--
=2	41107	--	--	--	--	--	--
=3	32000	--	--	--	--	--	--

ethod: N01KW Sample Name: 81188-8731 Operator: JC
un Time: 10/01/98 10:15:08
omment: M8951,8956 RR R#0373
ode: 70NC Corr Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0002	.1840	L-.0064	.0971	L-.0009	117.3	L.0001
Sdev	.0003	.0855	.0052	.0036	.0001	.8	.0001
%RSD	180.9	52.10	82.23	3.717	14.16	.6903	93.10
#1	L.0001	L.0654	L-.0120	.0932	L-.0007	116.1	L.0001
#2	L-.0003	.2159	L-.0018	.0998	L-.0010	118.0	L.0001
#3	L-.0003	.2108	L-.0053	.0991	L-.0010	117.3	L.0002
Errors	LC Low	LC Pass	LC Low	LC Pass	LC Low	LC Pass	LC Low
High	30.00	1400.	60.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0001	.0070	.0307	L-.0100	1.046	.0119	16.81
Sdev	.0012	.0006	.0317	.0168	.218	.0002	.35
%RSD	1872.	8.261	103.3	168.9	5.396	2.102	.7528
#1	.0013	.0074	L.0004	L-.0057	3.817	.0118	16.28
#2	L-.0001	.0063	.0636	L.0042	4.252	.0120	16.98
#3	L-.0011	.0073	.0281	L-.0285	1.069	.0120	16.68
Errors	LC Low	LC Pass	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High	30.00	60.00	60.00	100.0	30.00	9.000	1400.
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Elem	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.3156	.0060	196.8	.1937	-.0010	.0035	.0071
Sdev	.0049	.0015	1.6	.0050	.0053	.0026	.0031
%RSD	1.113	24.89	.8312	2.582	509.0	72.51	43.98
#1	.3102	.0048	194.9	.1895	-.0070	.0015	.0058
#2	.3163	.0078	197.6	.1993	.0005	.0006	L.0035
#3	.3200	.0057	197.8	.1921	.0033	.0055	.0089
Errors	LC Pass	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass
High	30.00	60.00	200.0	30.00			60.00
Low	.0030	.0020	.2000	.0050			.0040

Elem	198071	198072	Sn	Ti	V	Zn	Zr
Units			ppm	ppm	ppm	ppm	ppm
Avge	-.0135	-.0082	3.051	.0164	L-.0002	.8111	L.0020
Sdev	.0223	.0224	.508	.0121	.0000	.0183	.0021
%RSD	172.5	250.1	16.59	73.93	15.81	2.578	119.0
#1	-.0069	-.0105	2.711	.0290	L-.0002	.8131	L.0006
#2	.0050	-.0282	3.833	L.0048	L-.0001	.8369	L.0035
#3	-.0284	.0180	2.806	.0155	L-.0002	.8112	.0017

Errors	NOCHECK	NOCHECK	IC Pass	IC Pass	IC Low	IC Pass	IC Low

High	50.00	80.00	220.0	50.00	30.00
Low	.0030	-.0080	.0030	.0050	.0030

Elem	Se
Units	ppm
Avge	-.0083
Sdev	.0072
%RSD	87.15
#1	-.0089
#2	-.0152
#3	-.0008
Errors	IC Low
High	80.00
Low	.0040

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	360.063	--	--	--	--	--	--
Avge	23352	--	--	--	--	--	--
SD	251.0478	--	--	--	--	--	--
%	1.075059	--	--	--	--	--	--
#1	23322	--	--	--	--	--	--
#2	23117	--	--	--	--	--	--
#3	23277	--	--	--	--	--	--

Method: NOAIKW Sample Name: 84473-8700 Operator: JC
Run Time: 10/01/98 10:20:16
Comment: M8954,8956 RR R#0373
Mode: CONC Corr Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0000	.1814	.0013	.0038	.0001	.1475	-.0008
Sdev	.0002	.0623	.0121	.0013	.0003	.0110	.0004
%RSD	823.3	34.36	905.1	33.23	302.7	7.433	46.49
#1	.0001	.1477	.0091	.0029	.0002	.1524	-.0012
#2	-.0003	.1432	.0075	.0032	.0003	.1350	-.0005
#3	.0001	.2531	-.0126	.0052	-.0002	.1557	-.0007
Errors	IC Low	IC Pass	IC Low	IC Low	IC Low	IC Pass	IC Low
High	30.00	1000.	80.00	27.00	30.00	1000.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0007	.0004	-.0001	.0174	.0989	.0015	.0198
Sdev	.0018	.0001	.0014	.0020	.0360	.0001	.0053
%RSD	230.9	24.57	888.9	11.81	37.12	4.499	27.00
#1	-.0015	.0005	-.0009	.0184	.0609	.0014	.0125
#2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

#2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
#3	.0012	1.0003	1.0012	.0151	.1328	1.0015	.0328

errors	LC Low	LC Low	LC Low	LC Pass	LC Low	LC Low	LC Pass
High	20.00	80.00	60.00	100.0	30.00	9.000	1400
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080
Item	Mn	Mo	Na	Ni	220371	220372	Se
Units	ppm	ppm	ppm	ppm			ppm
Avge	1.0007	1-.0008	1.035	1.0007	.0022	.0031	.0058
SDev	.0001	.0023	.254	.0022	.0030	.0038	.0025
%RSD	12.88	241.5	24.50	310.0	137.3	58.35	46.40
#1	1.0008	1-.0027	.8437	1-.0003	.0033	.0030	.0082
#2	1.0008	1-.0018	.8379	1-.0008	.0041	.0080	.0050
#3	1.0008	1.0018	1.322	1.0033	-.0012	.0101	1.0031

errors	LC Low	LC Low	LC Pass	LC Low	NOCHECK	NOCHECK	LC Pass
High	20.00	80.00	200.0	30.00			80.00
Low	.0030	.0020	.2000	.0050			.0040
Item	196071	196072	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	-.0152	-.0017	1.053	.0126	1-.0003	.0097	.0050
SDev	.0114	.0074	.594	.0143	.0000	.0001	.0017
%RSD	75.21	415.8	56.41	113.8	11.99	1.401	31.01
#1	-.0218	.0067	1.891	1-.0003	1-.0003	.0096	.0031
#2	-.0181	-.0042	.9503	.0279	1-.0003	.0098	.0055
#3	-.0028	-.0075	.5162	.0100	1-.0003	.0098	.0083

errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Low	LC Pass	LC Pass
High			50.00	80.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0020
Item	Se						
Units	ppm						
Avge	1-.0059						
SDev	.0025						
%RSD	42.87						
#1	1-.0035						
#2	1-.0085						
#3	1-.0055						

errors	LC Low
High	80.00
Low	.0010

[illegible]	1	2	3	4	5	6	7
Mode	*Chemist	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Item	Y	--	--	--	--	--	--
Avgen	380.083	--	--	--	--	--	--
Avge	25125	--	--	--	--	--	--
[illegible]	[illegible]	--	--	--	--	--	-
%RSD	1.[illegible]	--	--	--			

000367

=1	25298	--	--	--	--	--	--

=2	25299	--	--	--	--	--	--
=3	24749	--	--	--	--	--	--

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thod: NOAIKW Sample Name: 81161-8677 / Operator: JC
n Time: 10/01/98 10:25:23
mment: M8951,8956 RR R#0373
de: COMC Corr. Factor: 1

Item	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0000	.2479	1.0036	.0433	1.0007	20.72	.0013
SDev	.0006	.0148	.0038	.0001	.0002	.20	.0021
%RSD	.3871	5.900	104.0	.2385	27.58	.9549	164.3
=1	1-.0006	.2419	1.0058	.0433	1.0004	20.80	1.0001
=2	1.0001	.2350	1-.0007	.0432	1.0008	20.75	1.0000
=3	.0006	.2638	1.0058	.0434	1.0007	20.51	.0037
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Low	IC Pass	IC Pass
High	30.00	1400.	60.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0004	.0061	.4572	.1295	2.517	.0230	1.730
SDev	.0004	.0001	.7916	.0240	.034	.0003	.018
%RSD	89.42	1.210	173.1	18.56	1.370	1.301	1.018
=1	1.0005	.0060	1.0001	.1218	2.496	.0231	1.718
=2	1-.0000	.0061	1.0002	.1103	2.498	.0227	1.722
=3	1.0008	.0061	1.371	.1564	2.557	.0232	1.750
Errors	IC Low	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass
High	30.00	80.00	80.00	400.0	30.00	9.000	1200
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Item	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.0050	1-.0033	15.14	.2458	.0020	.0025	.0112
SDev	.0007	.0013	.08	.1219	.0034	.0087	.0050
%RSD	3.094	130.5	.5593	171.8	112.8	188.9	44.48
=1	.0049	1-.0033	15.08	1.0033	.0088	.0095	.0082
=2	.0050	1-.0013	15.11	1.0011	.0018	-.0037	.0083
=3	.0057	1-.0004	15.24	.7331	.0004	.0048	.0170
Errors	IC Pass	IC Low	IC Pass	IC Pass	NOCHECK	NOCHECK	IC Pass
[illegible]	30.00	80.00	200.0	30.00			80.00
	.0030	.0020	.2000	.0050			.0040

Item	180371	180372	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	-.0258	-.0150	2.831	1.0057	.0146	.8108	.0[illegible]
SDev	.0101	.0039	1.378	.0121	.0003	.9181	.0057
%RSD	37.75	25.70	48.83	213.7	2.287	168.1	156.3

#1	-.0237	-.0110	1.701	-.0038	.0148	.0141	.0086

#2	-.0187	-.0152	2.428	.0193	.0147	.0097	-.0019
#3	-.0282	-.0187	4.370	-.0015	.0142	1.599	.0032
Errors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High			50.00	80.00	220.0	50.00	80.00
Low			.0030	.0080	.0030	.0050	.0030

Elem	Se
Units	ppm
Avge	-.0188
SDev	.0055
%RSD	29.37
#1	-.0149
#2	-.0180
#3	-.0218
Errors	LC Low
High	80.00
Low	.0040

IntStd	1	2	3	4	5	6	7
Y	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
-	Y	--	--	--	--	--	--
Maxlen	280.082	--	--	--	--	--	--
Avge	24720	--	--	--	--	--	--
SDev	715.8821	--	--	--	--	--	--
%RSD	.0331781	--	--	--	--	--	--
#1	24520	--	--	--	--	--	--
#2	25000	--	--	--	--	--	--
#3	24889	--	--	--	--	--	--

Method: NOAIKW Sample Name: 8678 Operator: JC
Run Time: 10/01/98 10:30:31
Comment: M8954,8956 RR R#0373
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	1801	-.0042	.0319	-.0001	18.89	-.0009
SDev	.0000	1042	.0080	.0022	.0002	.15	.0004
%RSD	11.39	57.78	192.7	6.787	125.7	.8037	44.20
#1	-.0002	1.0854	-.0059	.0300	1.0000	18.18	-.0008
#2	-.0002	1839	1.0025	.0315	-.0001	18.92	-.0009
#3	-.0002	.2918	-.0092	.0342	-.0003	18.88	-.0014
Errors	LC Low	LC Pass	LC Low	LC Pass	LC Low	LC Pass	LC Low
High	20.00	1400.	80.00	27.00	20.00	1400	15.00
Low	.0005	1000	.0100	.0050	.0010	.0500	.0010

Elem	Cr	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0008	.0051	.0257	.0114	2.820	.0220	1.468

2SD	86.48	4.081	133.0	38.28	3.933	1.827	1.340

=1	-.0001	.0053	.0819	.0112	2.507	.0218	1.500
=2	-.0001	.0050	.0108	-.0071	2.643	.0221	1.586
=3	-.0017	.0049	-.0015	.0108	2.709	.0223	1.520
errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	30.00	80.00	80.00	400.0	30.00	9.000	1400
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0020

Item	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	-.0004	-.0012	14.55	-.0017	.0048	.0033	.0090
SDev	.0001	.0017	.66	.0003	.0057	.0070	.0010
2SD	23.28	142.1	4.529	14.74	117.8	214.9	10.87
=1	-.0003	-.0030	13.88	-.0020	.0000	.0093	.0101
=2	-.0003	-.0005	14.58	-.0016	.0111	.0048	.0084
=3	-.0005	-.0012	15.20	-.0016	.0034	-.0044	.0084
errors	LC Low	LC Low	LC Pass	LC Low	NOCHECK	NOCHECK	LC Pass
High	30.00	80.00	200.0	30.00			80.00
Low	.0020	.0020	.2000	.0050			.0040

Item	1980/1	1980/2	Sn	Ti	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.0085	-.0004	2.301	-.0000	.0127	.0358	.0038
SDev	.0292	.0097	1.049	.0109	.0003	.0077	.0040
2SD	135.1	2280.	45.57	32970.	2.540	21.40	128.2
=1	-.0248	.0077	1.169	-.0104	.0129	.0447	.0062
=2	-.0217	.0022	3.240	-.0011	.0123	.0325	.0069
=3	.0088	-.0112	2.498	.0114	.0128	.0304	-.0018
errors	NOCHECK	NOCHECK	LC Pass	LC Low	LC Pass	LC Pass	LC Pass
High			50.00	60.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0030

Item	Se
Units	ppm
Avge	-.0022
SDev	.0128
2SD	583.1
=1	.0170
=2	-.0054
=3	-.0050
errors	LC Low
High	80.00
Low	.0040

StdNo	1	2	3	4	5	6	7
Code	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Item	\	--	--	--	--	--	--

000370

SDev	83.11639	--	--	--	--	--	--
%RSD	.3372226	--	--	--	--	--	--
#1	21721	--	--	--	--	--	--
#2	21559	--	--	--	--	--	--
#3	21859	--	--	--	--	--	--

Method: N041KW Sample Name: 8682 Operator: JC
Run Time: 10/01/98 10:35:39
Comment: X8951,895R RR R#0373
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	I-.0002	.2517	I-.0057	.0301	I-.0003	17.09	I-.0011
SDev	.0004	.1212	.0041	.0024	.0002	.03	.0010
%RSD	205.7	48.15	71.23	7.785	73.75	.1718	92.24
#1	I.0003	.1200	I-.0010	.0275	I-.0000	17.05	I-.0022
#2	I-.0004	.2788	I-.0081	.0309	I-.0003	17.11	I-.0005
#3	I-.0005	.3588	I-.0080	.0320	I-.0004	17.10	I-.0005
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Low	IC Pass	IC Low
Ab	30.00	1400.	60.00	27.00	30.00	1400.	15.00
	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	I-.0008	.0082	I.0003	I.0011	1.813	.0225	1.297
SDev	.0005	.0008	.0007	.0187	.138	.0007	.018
%RSD	66.88	9.107	278.2	1694.	7.595	2.910	1.398
[illegible]	I-.0001	.0085	I-.0001	I-.0140	1.863	.0218	1.313
[illegible]	I-.0012	.0055	I.0011	I-.0049	1.933	.0231	1.474
[illegible]	I-.0005	.0084	I-.0002	.0220	1.844	.0227	1.415
Errors	IC Low	IC Pass	IC Low	IC Low	IC Pass	IC Pass	IC Pass
Ab	30.00	60.00	60.00	400.0	30.00	8.000	1400
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Elem	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	I.0002	I-.0027	12.27	I.0021	.0033	.0030	.0097
SDev	.0000	.0027	.82	.0008	.0050	.0058	.0081
%RSD	8.491	102.0	7.197	39.88	151.7	188.0	83.08
[illegible]	I.0002	I-.0021	11.25	I.0011	.0089	-.0029	.0151
[illegible]	I.0002	I-.0057	12.88	I.0025	.0018	.0083	I.0032
[illegible]	I.0002	I-.0003	12.88	I.0027	-.0008	.0035	.0102
[illegible]	IC Low	IC Low	IC Pass	IC Low	NOCHECK	NOCHECK	IC Pass
[illegible]	30.00	60.00	200.0	20.00			80.00
[illegible]	.0020	.0020	.2000	.0050			.0040
[illegible]	[illegible]	[illegible]	Sn	[illegible]	[illegible]	[illegible]	[illegible]

000371

			ppm	ppm	ppm	ppm	ppm
Avge	- .0000	- .0085	2.608	1.0053	.0098	.0269	.0031

SDev	.0170	.0163	.189	.0081	.0001	.0039	.0026
%RSD	51730.	170.1	18.76	154.7	.9551	14.37	85.46
#1	.0184	-.0015	3.061	1.0008	.0097	.0224	1.0011
#2	-.0119	.0011	2.673	.0146	.0099	.0292	.0081
#3	-.0076	-.0283	2.089	1.0002	.0098	.0290	1.0021
Errors	NOCHECK	NOCHECK	IC Pass	IC Low	IC Pass	IC Pass	IC Pass
High			50.00	80.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0030

Elem	Se
Units	ppm
Avge	1-.0080
SDev	.0137
%RSD	228.8
#1	.0058
#2	1-.0028
#3	1-.0210
Errors	IC Low
High	80.00
Low	.0010

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	360.063	--	--	--	--	--	--
Avge	24186	--	--	--	--	--	--
SDev	247.7304	--	--	--	--	--	--
%RSD	1.024258	--	--	--	--	--	--
#1	24110	--	--	--	--	--	--
#2	23915	--	--	--	--	--	--
#3	24171	--	--	--	--	--	--

Method: M201.1W Sample Name: 81102-9739 Operator: JC
Run Time: 10/01/98 10:10:48
Comment: M8Pb1,8956 RR R#0373
Mode: CONC Corr. Factor: 1

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0000	.2058	1-.0036	.0192	1.0004	15.03	1-.0014
SDev	.0003	.1008	.0083	.0020	.0001	.10	.0008
%RSD	1529.	49.02	228.8	10.38	35.69	.6861	59.46
#1	1-.0000	.1487	1.0058	.0179	1.0005	14.93	1-.0007
#2	1.0001	.1455	1-.0071	.0182	1.0004	15.14	1-.0023
#3	1-.0003	.3223	1-.0091	.0215	1.0002	15.01	1-.0011
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Low	IC Pass	IC Low
High	30.00	1400.	80.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

000972

Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0003	.0039	1-.0006	.0705	1.472	.0242	2.920
SDev	.0010	.0004	.0002	.0108	.065	.0005	.052
%RSD	382.7	11.39	41.77	15.01	1.440	1.973	1.772
#1	1.0003	.0040	1-.0006	.0749	1.418	.0238	2.882
#2	.0012	.0042	1-.0009	.0581	1.454	.0240	2.981
#3	1-.0008	.0034	1-.0001	.0782	1.545	.0247	2.938
Errors	IC Low	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
High	30.00	60.00	60.00	400.0	30.00	9.000	1400.
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Elem	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	1.0027	1-.0032	11.42	1.0024	-.0007	.0031	.0056
SDev	.0003	.0013	.53	.0013	.0013	.0084	.0086
%RSD	10.55	40.60	4.680	53.94	188.8	271.9	152.0
#1	1.0028	1-.0046	10.87	1.0032	.0007	.0127	1-.0034
#2	1.0025	1-.0020	11.28	1.0009	-.0010	-.0007	.0087
	.0030	1-.0029	12.01	1.0031	-.0017	-.0028	.0138
Errors	IC Low	IC Low	IC Pass	IC Low	NOCHECK	NOCHECK	IC Pass
High	30.00	60.00	200.0	30.00			60.00
Low	.0020	.0020	.2000	.0050			.0040

Elem	1960/1	1960/2	Sn	Ti	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.0163	-.0038	2.280	.0154	.0103	.0260	1.0018
SDev	.0063	.0177	.792	.0079	.0004	.0024	.0060
%RSD	38.71	452.8	34.75	51.33	3.700	9.277	330.7
#1	.0148	.0125	2.445	.0105	.0100	.0237	.0087
#2	.0109	-.0227	1.419	.0245	.0107	.0259	1-.0008
#3	.0232	-.0015	2.978	.0111	.0103	.0288	1-.0025
Errors	NOCHECK	NOCHECK	IC Pass	IC Pass	IC Pass	IC Pass	IC Low
High			50.00	80.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0020

Elem	Sr
Units	ppm
Avge	1.0031
SDev	.0128
%RSD	408.7
#1	.0138
#2	1-.0112
#3	.0071
Errors	IC Low
High	80.00
Low	.0040

IC Pass	IC Low	IC Pass	IC Low	IC Pass	IC Low	

High	30.00	1400.	60.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Item	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0002	.0051	1-.0017	.0785	1.721	.0208	3.178
SDev	.0008	.0002	.0005	.0109	.031	.0001	.008
%RSD	392.8	3.820	28.12	13.88	1.794	.2287	.2101
#1	1-.0007	.0048	1-.0011	.0585	1.700	.0207	3.189
#2	.0012	.0053	1-.0021	.0901	1.758	.0208	3.189
#3	1.0002	.0051	1-.0017	.0769	1.706	.0208	3.189

Errors	IC Low	IC Pass	IC Low	IC Pass	IC Pass	IC Pass	IC Pass
High	20.00	80.00	80.00	400.0	30.00	9.000	1400
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080

Item	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.0032	1-.0011	10.50	1.0013	.0020	.0040	1-.0021
SDev	.0001	.0015	.23	.0018	.0035	.0008	.0118
%RSD	2.960	132.4	2.203	128.4	173.0	18.79	188.3
#1	.0031	1-.0003	10.42	1.0020	-.0020	.0040	1-.0155
#2	.0033	1-.0003	10.76	1.0024	.0033	.0032	.0067
#3	.0031	1-.0029	10.32	1-.0006	.0047	.0047	1.0018

Errors	IC Pass	IC Low	IC Pass	IC Low	NOCHECK	NOCHECK	IC Low
High	30.00	80.00	200.0	30.00			80.00
Low	.0030	.0020	.2000	.0050			.0010

Item	188071	188072	Sn	Ti	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	-.0014	-.0108	1.719	.0176	.0071	.0298	.0023
SDev	.0152	.0011	1.244	.0092	.0010	.0012	.0014
%RSD	340.0	10.38	72.39	52.08	14.31	3.955	60.78
#1	-.0211	-.0113	.1924	.0240	.0083	.0303	1.0020
#2	.0088	-.0094	2.881	.0216	.0083	.0292	.0023
#3	-.0008	-.0113	1.681	1.0071	.0082	.0292	.0017

Errors	NOCHECK	NOCHECK	IC Pass	IC Pass	IC Pass	IC Pass	IC Pass
High			50.00	80.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0020

Item	Se
Units	ppm
Avge	1-.0082
	.0058
	88.40
	1-.0112
	1-.0031
	1-.0071

000376

Errors	1.00	
High	80.00	

Row 0010

IntStd	1	2	3	4	5	6	7
Mode	#Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Item	Y	--	--	--	--	--	--
Median	380.063	--	--	--	--	--	--
Avge	24785	--	--	--	--	--	--
SDev	28.74801	--	--	--	--	--	--
%RSD	.1159363	--	--	--	--	--	--
#1	24772	--	--	--	--	--	--
#2	24785	--	--	--	--	--	--
#3	24827	--	--	--	--	--	--

Method: NOALKW Sample Name: 8743 Operator: JC
Run Time: 10/01/98 10:56:09
Comment: M8954,8956 RR R#0373
Mode: CONC Corr. Factor: 1

Item	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
A	1-.0002	.1772	1-.0085	.0278	1.0002	11.20	1-.0005
SD	.0005	.0018	.0085	.0002	.0002	.10	.0003
%RSD	261.3	1.016	99.25	.8727	108.5	.8856	53.18
#1	1.0003	.1758	1-.0108	.0280	1.0003	11.11	1-.0003
#2	1-.0002	.1792	1-.0157	.0275	1.0002	11.18	1-.0005
#3	1-.0007	.1768	1.0008	.0278	1-.0000	11.31	1-.0008
Errors	LC Low	LC Pass	LC Low	LC Pass	LC Low	LC Pass	LC Low
High	20.00	1400.	80.00	27.00	30.00	1400.	15.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010

Item	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.0001	.0038	1-.0008	1.0039	1.615	.0202	2.890
SDev	.0008	.0006	.0005	.0085	.021	.0003	.037
%RSD	172.1	16.71	60.81	185.1	1.320	1.412	1.259
#1	1-.0003	.0037	1-.0008	1-.0018	1.620	.0202	2.887
#2	1.0008	.0045	1-.0005	.0110	1.592	.0198	2.871
#3	1.0009	.0032	1-.0011	1.0028	1.634	.0205	2.932
Errors	LC Low	LC Pass	LC Low	LC Low	LC Pass	LC Pass	LC Pass
High	30.00	80.00	80.00	400.0	30.00	9.000	1400
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0020

	Mn	Mo	Na	Ni	220371	220372	Sb
	ppm	ppm	ppm	ppm			ppm
Avge	1.0002	1-.0014	10.33	1.0005	-.0022	-.0018	.0140
SDev	.0001	.0005	.08	.0015	.0042	.0081	
%RSD	10.35	35.17	.8225	312.8	186.3	334.8	26.01
#1	1.0002	1-.0011	10.32	1-.0008	-.0028	-.0057	.0140
#2	1.0009	1-.0020	10.27	1.0001	.0024	-.0080	.0161

000377

Errors	LC Low	LC Low	LC Pass	LC Low	NOCHECK	NOCHECK	LC Pass
High	30.00	80.00	200.0	30.00			80.00
Low	.0030	.0020	.2000	.0050			.0040

Elem	196071	196072	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	-.0010	-.0027	.1971	.0220	.0080	.0233	L-.0020
SDev	.0207	.0128	.5047	.0285	.0008	.0012	.0032
%RSD	2072.	474.7	256.0	129.1	12.92	5.280	159.7
#1	.0141	-.0058	L-.3218	L-.0094	.0056	.0240	L-.0044
#2	.0071	-.0134	.2269	.0294	.0055	.0219	L-.0032
#3	-.0245	.0112	.6863	.0461	.0089	.0240	L.0016

Errors	NOCHECK	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Low
High			50.00	60.00	220.0	50.00	30.00
Low			.0030	.0080	.0030	.0050	.0030

Elem	Se
Units	ppm
Avge	L-.0018
SDev	.0039
%RSD	220.3
#1	L.0012
#2	L-.0082
#3	L-.0004

Errors	LC Low
High	80.00
Low	.0040

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	360.073	--	--	--	--	--	--
Avge	21959	--	--	--	--	--	--
SDev	72.50517	--	--	--	--	--	--
%RSD	.2901971	--	--	--	--	--	--
#1	21980	--	--	--	--	--	--
#2	25021	--	--	--	--	--	--
#3	21888	--	--	--	--	--	--

Method: M0414A Sample Name: 811R1-8883 Operator: JC
Run Time: 10/01/98 11:01:17
Comment: M8054,8058 RR R#0373
  ** COMC Corr Factor: 1839.31

Elem	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	L-.0001	85821.	L-11.22	857.57	.9389	811810.	L-.2873
SDev	.2889	53.	13.15	1.21	.1211	88	
%RSD	192700.	9884	117.0	2.090	12.89	.3391	135.5

#1	1-.1870	#6170.	1-6.148	#56.30	.8970	#19210.	1-.4000
#2	1-.1087	#5559.	1-1.149	#57.60	1.022	#19310.	1-.5621

#3	.9952	#5570	1-26.10	#52.77	.8008	#19370.	1.554
Errors	IC Low	IC High	IC Low	IC High	IC Pass	IC High	IC Low
High	30.00	1400	80.00	27.00	30.00	1400	1.00
Low	.0005	.1000	.0100	.0050	.0010	.0500	.0010
Elem	Ca	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.153	#98.91	#282.0	#30370	#703.0	#10.98	791.7
SDev	.880	1.45	1.7	150.	21.1	.14	3.2
%RSD	25.19	1.494	.6191	.4927	3.018	1.235	.4133
#1	2.999	#98.23	#283.9	#30440.	#679.9	#10.82	791.0
#2	4.168	#97.15	#280.4	#30190	#792.3	#11.03	787.0
#3	2.893	#95.36	#281.8	#30470.	#708.7	#11.08	788.0
Errors	IC Pass	IC High	IC High	IC High	IC High	IC High	IC Pass
High	30.00	80.00	80.00	100.0	30.00	9.000	1400.
Low	.0010	.0020	.0020	.0100	.1000	.0050	.0080
Elem	Mn	Mo	Na	Ni	2203/1	2203/2	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	#1181.	1-2.162	#1812.	23.82	22.35	27.52	1-.8811
SDev	20.	3.519	94.	2.69	15.95	14.63	15.188
%RSD	.1582	162.8	5.161	11.29	71.31	53.16	2229
#1	#1182	1.082	#1711.	28.92	9.111	40.79	14.98
#2	#1188.	1-5.900	#1830.	22.18	17.89	29.91	1-15.37
#3	#1112	1-1.875	#1895.	22.09	40.05	11.83	1-1.810
Errors	IC High	IC Low	IC High	IC Pass	NOCHECK	NOCHECK	IC Low
High	30.00	80.00	200.0	30.00			80.00
Low	.0020	.0020	.2000	.0050			.0010
Elem	1980/1	1980/2	Sn	Ti	V	Zn	Zr
Units			ppm	ppm	ppm	ppm	ppm
Avge	-8.800	-71.84	#2885.	29.11	18.50	#217.7	75.20
SDev	38.779	28.83	1837.	18.22	.10	1.8	1.51
%RSD	160.9	108.8	58.75	61.88	2.172	1.859	17.17
#1	-18.75	-12.81	#998.0	38.10	18.73	#211.5	#30.24
#2	28.81	-55.88	#3717.	8.770	18.71	#215.8	75.03
#3	-5.887	-5.902	#3939.	13.18	18.04	#253.0	71.23
Errors	NOCHECK	NOCHECK	IC High	IC Pass	IC Pass	IC High	IC Pass
High			50.00	80.00	220.0	50.00	30.00
			.0030	.0080	.0030	.0050	.0030
Elem	Sr						
Units	ppm						
Avge	1-18.78						
SDev	11.75						
%RSD	62.88						
#1	1-21.14						

Errors	IC Low						
High	80.00						
Low	.0010						
IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Item	Y	--	--	--	--	--	--
Gaussian	280.082	--	--	--	--	--	--
Avge	25050	--	--	--	--	--	--
SDev	272.7582	--	--	--	--	--	--
%RSD	1.088855	--	--	--	--	--	--
#1	25281	--	--	--	--	--	--
#2	25117	--	--	--	--	--	--
#3	24727	--	--	--	--	--	--

Method: NOAIKW Sample Name: CCV Operator: JC
Run Time: 10/01/98 11:07:39
Comment: M8981,8958 RR R=0373
Mode: CONC Corr. Factor: 1

Item	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.005	Q8.009	.9767	.9805	.9881	9.180	.9897
SDev	.005	.188	.0153	.0128	.0104	.086	.0081
%RSD	.5288	2.327	1.565	1.303	1.051	.9115	.8808
#1	1.000	Q7.929	.9936	.9810	.9797	9.117	.9723
#2	1.011	Q8.223	.9840	.9875	.9997	9.578	.9802
#3	1.005	Q7.877	.9725	.9930	.9850	9.115	.9765
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.000	10.00	1.000	1.000	1.000	10.00	1.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Item	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9875	.9412	.9781	.9585	Q.0082	Q.0015	.9580
SDev	.0019	.0121	.0097	.0328	.0070	.0000	.0139
%RSD	.1877	1.315	.9889	3.420	112.0	2.575	1.555
#1	.9882	.9287	.9889	.9413	Q.0106	Q.0015	.9455
#2	.9867	.9417	.9822	.9811	Q-.0018	Q.0014	.9589
#3	.9896	.9535	.9781	.9942	Q.0100	Q.0015	.9753
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Fail	QC Fail	QC Pass
Value	1.000	1.000	1.000	1.000	10.00	10.00	1.000
Range	10.00	10.00	10.00	10.00	10.00	10.00	10.00

Item	Mn	Mo	Na	Ni	220371	220372	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.9782	.9611	9.358	.9872	.9843	.9592	1.038
SDev	.0117	.0089	.101	.0072	.0088	.0049	.007
%RSD	1.198	1.021	1.116	.7251	.8861	.5057	.6816

=1	.9722	.9500	9.238	.9832	.9845	.9581	1.031

=2	.9630	.9692	9.109	.9829	.9753	.9587	1.036
=3	.9891	.9610	9.127	.9951	.9930	.9618	1.015

Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	NOCHECK
Value	1.000	1.000	10.00	1.000			
Range	10.00	10.00	10.00	10.00			

Item	1960/1	1960/2	Sn	Tl	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.9434	.9512	Q1.650	.9071	.9793	.9553	.9876
SDev	.0282	.0216	1.089	.0167	.0147	.0029	.0059
%RSD	2.984	2.267	65.99	1.841	1.506	.2982	.6077

=1	.9140	.9715	Q1.715	Q.8979	.9825	.9531	.9858
=2	.9461	.9288	Q.5301	Q.8971	.9853	.9585	.9829
=3	.9701	.9525	Q2.705	.9984	.9901	.9541	.9717

Errors	NOCHECK	NOCHECK	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value			1.000	1.000	1.000	1.000	1.000
Range			10.00	10.00	10.00	10.00	10.00

	Se
Item	ppm
Avge	.9489
SDev	.0127
%RSD	1.342
=1	.9527
=2	.9347
=3	.9591

Errors	QC Pass
Value	1.000
Range	10.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Item	Y	--	--	--	--	--	--
Analyte	360.063	--	--	--	--	--	--
Avge	25918	--	--	--	--	--	--
SDev	198.8197	--	--	--	--	--	--
%RSD	.7511172	--	--	--	--	--	--
=1	25927	--	--	--	--	--	--
=2	25339	--	--	--	--	--	--
=3	26090	--	--	--	--	--	--

Id: NOTUSED Sample Name: CCB Operator: JC
Time: 10/01/98 11:12:18
Comment: M8944,8988 98 R#0373
Dil: CONC Conc. Factor: 1

000381

Item	Ag	Al	As	Ba	Be	Ca	Cd
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	.0718	.0030	.0005	B.0009	.0010	-.0003

2RSD	3.742	8.958	306.1	31.51	12.45	318.5	35.78

#1	H.0007	.0753	H.0125	.0007	H.0010	.0048	L-.0001
#2	.0007	.0810	.0024	.0005	H.0010	-.0014	-.0002
#3	.0007	.0878	L-.0058	.0004	H.0008	-.0003	-.0002
Errors	IC Pass	IC Pass	IC Pass	IC Pass	IC High	IC Pass	IC Pass
High	.0007	.1000	.0040	.0020	.0002	.1000	.0002
Low	-.0007	-.1000	-.0040	-.0020	-.0002	-.1000	-.0002
Elem	Co	Cr	Cu	Fe	K	Li	Mg
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0005	H.0010	L-.0020	.0019	.0093	.0014	H.0148
Sdev	.0004	.0005	.0012	.0043	.0080	.0001	.0018
2RSD	99.82	48.85	63.27	228.1	85.60	3.310	10.98
#1	-.0000	.0006	-.0006	.0018	.0003	.0014	H.0164
#2	.0008	H.0016	L-.0031	-.0024	.0122	.0015	H.0132
#3	.0005	.0008	L-.0022	.0063	.0155	.0015	H.0148
Errors	IC Pass	IC High	IC Low	IC Pass	IC Pass	IC Pass	IC High
High	.0010	.0010	.0010	.0200	.1000	.0050	.0080
	-.0010	-.0010	-.0010	-.0200	-.1000	-.0050	-.0080
Elem	Mn	Mo	Na	Ni	2202/1	2202/2	Sb
Units	ppm	ppm	ppm	ppm			ppm
Avge	.0002	-.0007	.0108	.0009	.0071	.0004	H.0158
Sdev	.0003	.0005	.0004	.0010	.0041	.0063	.0099
2RSD	31.31	75.13	3.735	115.7	58.53	1725	125.1
#1	.0012	-.0010	.0109	.0009	.0042	.0077	-.0001
#2	.0010	-.0010	.0112	-.0007	.0118	-.0029	H.0170
#3	.0008	-.0001	.0104	.0018	.0052	-.0037	-.0001
Errors	IC Pass	IC Pass	IC Pass	IC Pass	NOCHECK	NOCHECK	IC High
High	.0030	.0020	.2000	.0050			.0010
Low	-.0030	-.0020	-.2000	-.0050			-.0010
Elem	1980/1	1980/2	Sn	Ti	V	Zn	Pb
Units			ppm	ppm	ppm	ppm	ppm
Avge	.0027	-.0050	1.588	H.0191	.0006	.0023	.0028
Sdev	.0115	.0142	.124	.0039	.0001	.0012	.0037
2RSD	313.1	283.8	28.72	20.13	65.82	51.12	140.7
#1	.0182	-.0188	1.563	H.0202	.0001	.0018	H.0085
#2	-.0081	-.0058	1.182	H.0149	.0010	.0037	.0020
#3	.0012	.0085	2.022	H.0223	.0001	.0018	-.0017
Elem	NOCHECK	NOCHECK	NOCHECK	IC High	IC Pass	IC Pass	IC Pass
Units				.0080	.0020	.0050	.0020
Low				-.0080	-.0020	-.0050	-.0020
Elem	Se						
Units	ppm						
Avge	-.0012						
Sdev	.0027						

1	1 -.0088
2	1 -.0055
3	8.0070

ampns	IC Pass
igh	.0010
ow	- .0010

atch	1	2	3	4	5	6	7
ode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
tem	Y	--	--	--	--	--	--
aveln	880.082	--	--	--	--	--	--
vge	21820	--	--	--	--	--	--
Dev	110.8781	--	--	--	--	--	--
RSD	.1833921	--	--	--	--	--	--
1	21918	--	--	--	--	--	--
2	21712	--	--	--	--	--	--
3	21798	--	--	--	--	--	--

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thod: NOALKW Sample Name: 8663 AS Operator: JC
r me: 10/01/98 11:17:56
t: M8051,8356 RR R=0373
de CONC Corr. Factor: 1639.34

tem	Ag	Al	As	Ba	Be	Ca	Cd
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	H8281	H5182.	6.079	H57.08	1.175	H18920.	-.8181
Dev	34	34	9.155	.16	.411	67.	.0010
RSD	.1153	.8177	155.5	.8007	34.93	.3558	118.1
1	H8210.	H5159.	-3.758	H56.61	1.543	H18900	-.8[illegible]
2	H8212	H5186	6.892	H57.52	.7323	H18880	-.8[illegible]
3	H8200	H5521.	15.10	H57.01	1.250	H18990	.1711
ampns	IC High	IC High	IC Pass	IC High	IC Pass	IC High	IC Low
igh	30.00	1100	80.00	27.00	30.00	1100.	15.00
ow	.0005	.1000	.0100	.0050	.0010	.0500	.0010

tem	Co	Cr	Cu	Fe	K	Li	Mg
nits	ppm	ppm	ppm	ppm	ppm	ppm	ppm
vge	1.788	H97.22	H8232.	H38140.	H711.8	H11.07	775.7
Dev	.096	.82	47.	185.	30.0	.11	7.0
RSD	8.157	.8129	.5711	.1819	4.218	1.022	.8081
1	1.881	H96.85	H8178	H37910.	H680.8	H10.91	778.0
2	1.931	H98.16	H8257.	H38290.	H710.7	H11.11	782.8
3	1.119	H98.85	H8261.	H38200.	H713.8	H11.15	768.5
ampns	IC Pass	IC High	IC High	IC High	IC High	IC High	IC Pass
igh	30.00	80.00	80.00	100.0	30.00	8.000	[illegible]
ow	.0010	.0020	.0020	.0100	.1000	.0050	[illegible]

tem	Mn	Mo	Na	Ni	[illegible]	[illegible]	[illegible]
nits	[illegible]	ppm	ppm	ppm			
vge	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

000085

Varian SpectrAA 10/20 System Report

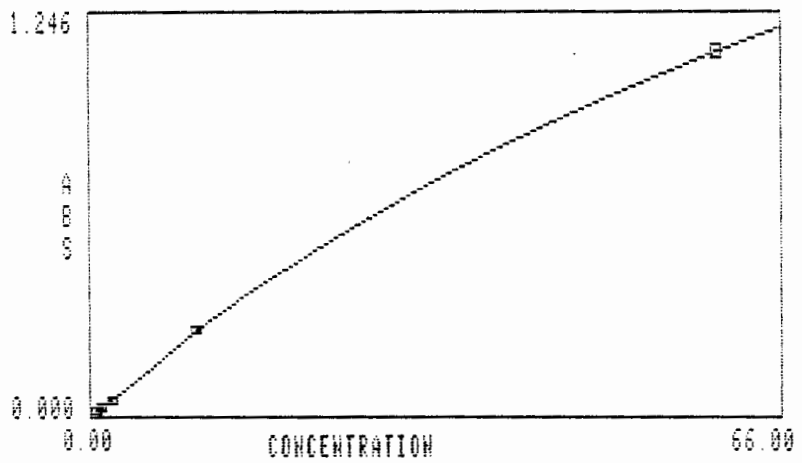
OPERATOR Smm
DATE 9.30.98
BATCH NO. 000741

Dig 8954 9-29-98
Run 741 9-30-98

PROGRAM 21 K

INSTRUMENT MODE	ABSORBANCE
CALIBRATION MODE	CONCENTRATION
MEASUREMENT MODE	INTEGRATION
LAMP POSITION	3
LAMP CURRENT (mA)	5
SLIT WIDTH (nm)	1.0
WAVELENGTH (nm)	766.5
FLAME	AIR-ACETYLENE
SAMPLE INTRODUCTION	MANUAL
DELAY TIME	2
TIME CONSTANT	0.05
MEASUREMENT TIME (sec)	1.0
REPLICATES	3
BACKGROUND CORRECTION	OFF
OXIDANT FLOW	3.5
ACETYLENE FLOW	1.5

SAMPLE	CONC	%RSD	MEAN ABS	READINGS		
BLANK	0.00		0.003	0.003	0.003	0.003
BLANK	0.00		0.000	-0.000	0.001	0.000
STANDARD 1	0.50	7.7	0.010	0.010	0.010	0.009
STANDARD 2	1.00	1.5	0.021	0.021	0.022	0.021
STANDARD 3	2.00	2.9	0.044	0.043	0.045	0.045
STANDARD 4	10.00	0.9	0.256	0.254	0.256	0.259
STANDARD 5	60.00	0.6	1.132	1.134	1.138	1.125



SAMPLE	CONC	%RSD	MEAN ABS	READINGS			
1 0 ICV	0.96 96%	2.0	0.020	0.020	0.021	0.020	
ICB	-0.01 ND	99.9	-0.000	0.000	-0.000	-0.001	
3	0.51	6.5	0.010	0.011	0.009	0.010	
.29.8954 PS	4.99 100%	0.6	0.119	0.118	0.119	0.119	
.29 PB	-0.01 ND	99.9	-0.000	-0.001	-0.000	0.000	
84421.8548	5.32	1.3	0.128	0.128	0.126	0.130	
0.0 CCB	0.01 ND	99.9	0.000	-0.000	0.000	0.000	
1.0 CCV	0.95 95%	2.6	0.020	0.020	0.020	0.020	
84425.8556	1.58	1.0	0.034	0.035	0.034	0.035	
8557	0.65	4.7	0.013	0.014	0.013	0.013	
8558	1.35	0.8	0.029	0.029	0.029	0.029	
0.0 CCB	0.00 ND	99.9	0.000	-0.000	-0.000	0.001	
1.0 CCV	0.97 97%	2.9	0.020	0.021	0.020	0.020	
84464.8677	2.22	1.6	0.049	0.050	0.049	0.049	
8678	2.47	1.4	0.055	0.056	0.055	0.054	
8679	1.65	1.3	0.036	0.036	0.036	0.035	
8680	2.11	0.5	0.046	0.046	0.046	0.047	
0.0 CCB	0.04 ND	30.6	0.001	0.001	0.001	0.001	
1.0 CCV	1.00 100%	0.5	0.021	0.021	0.021	0.021	
8681	1.77	1.3	0.039	0.039	0.039	0.038	
8682	1.53	1.0	0.033	0.033	0.033	0.033	
84492.8739	1.39	1.8	0.030	0.030	0.029	0.031	
8740	1.17	0.4	0.025	0.025	0.025	0.025	
0.0 CCB	0.06 ND	55.7	0.001	0.002	0.002	0.000	
1.0 CCV	1.00 100%	2.9	0.021	0.021	0.021	0.022	
8741	1.21	1.4	0.026	0.026	0.026	0.026	
8742	1.70	2.0	0.037	0.038	0.036	0.037	
43	1.57	1.6	0.034	0.035	0.034	0.034	
.0 CCB	0.06 ND	20.5	0.001	0.001	0.001	0.001	
1.0 CCV	1.04 104%	1.2	0.022	0.022	0.022	0.023	
744.2.1 MS	5.29 74%	1.1	0.127	0.127	0.125	0.128	
8745.2.2 MSD	5.20 73%	1.4	0.125	0.123	0.127	0.124	
8746	0.12	16.2	0.002	0.002	0.002	0.003	
34 8743 Aspk	5.95 88%	0.4	0.145	0.145	0.145	0.144	

34 8/13 MDK	5.95 ug	0.4	0.143	0.143	0.143	0.144

PLE	CONC	%RSD	MEAN ABS	READINGS		
35 CCB	0.19 ND	16.9	0.004	0.003	0.004	0.005
36 CCV	1.11	2.2	0.024	0.023	0.024	0.024
37 CCB	0.18	16.1	0.004	0.004	0.003	0.003
38 CCB	0.19 ND	7.4	0.004	0.004	0.004	0.004
39 CCV	1.08 108%	2.0	0.023	0.024	0.023	0.023

V ian SpectrAA 10/20 System Report

Dig 558 10-1-98
Run 743 10-1-98

OPERATOR smm
DATE 10.1.98
BATCH NO. 000743

PROGRAM 26 Hg

INSTRUMENT MODE	ABSORBANCE
CALIBRATION MODE	CONCENTRATION
MEASUREMENT MODE	INTEGRATION
LAMP POSITION	4
LAMP CURRENT (mA)	4
SLIT WIDTH (nm)	0.5
WAVELENGTH (nm)	253.7
FLAME	AIR-ACETYLENE
SAMPLE INTRODUCTION	AUTO NORMAL
DELAY TIME	70
TIME CONSTANT	0.05
MEASUREMENT TIME (sec)	1.0
REPLICATES	3
BACKGROUND CORRECTION	OFF
OXIDANT FLOW	3.5
ACETYLENE FLOW	1.5
RINSE RATE	1
RINSE TIME (sec)	65.0
RECALIBRATION RATE	0
RESLOPE RATE	0

SAMPLE	CONC	%RSD	MEAN ABS	READINGS		
BLANK	0.000		0.002	0.001	0.002	0.001
BLANK	0.000		-0.001	-0.001	-0.001	-0.000
STANDARD 1	0.200	10.5	0.005	0.004	0.005	0.005
STANDARD 2	0.400	3.0	0.010	0.010	0.010	0.010
STANDARD 3	1.000	3.4	0.023	0.023	0.023	0.024
STANDARD 4	2.000	2.5	0.044	0.043	0.044	0.045
STANDARD 5	5.000	2.9	0.113	0.110	0.112	0.116

84468.8688	-0.002	99.9	-0.000	-0.000	0.000	0.000
2.1 MS	0.928 93%	5.8	0.022	0.021	0.022	0.023
8689	0.011	74.2	0.000	0.000	0.000	0.001
8690	0.017	37.8	0.000	0.000	0.000	0.001

SAMPLE	CONC	%RSD	MEAN ABS	READINGS		
8691	0.007	99.9	0.000	-0.000	0.000	0.000
8692	0.037	36.5	0.001	0.001	0.001	0.001
8693	0.046	21.1	0.001	0.001	0.001	0.001
Rinse	0.021	30.2	0.001	0.001	0.001	0.000
1.0 CCV	1.058 106%	3.6	0.025	0.024	0.024	0.026
0.0 CCB	0.017 ND	0.0	0.000	0.000	0.000	0.000
84480.8713	0.013	99.9	0.000	0.001	0.000	-0.000
2.1 MS	1.016 102%	2.3	0.024	0.023	0.024	0.024
84480.8714	0.142	3.0	0.004	0.004	0.003	0.004
2.1 MS	0.676 68%	0.6	0.016	0.016	0.016	0.017
84462.8674 15%	0.046 ND	5.3	0.001	0.001	0.001	0.001
2.1 MS	0.746 75%	3.3	0.018	0.018	0.019	0.017
46 CCB	0.037 ND	21.5	0.001	0.001	0.001	0.001
47 CCV	0.977 98%	6.5	0.023	0.022	0.023	0.025

Varian SpectrAA 10/20 System Report

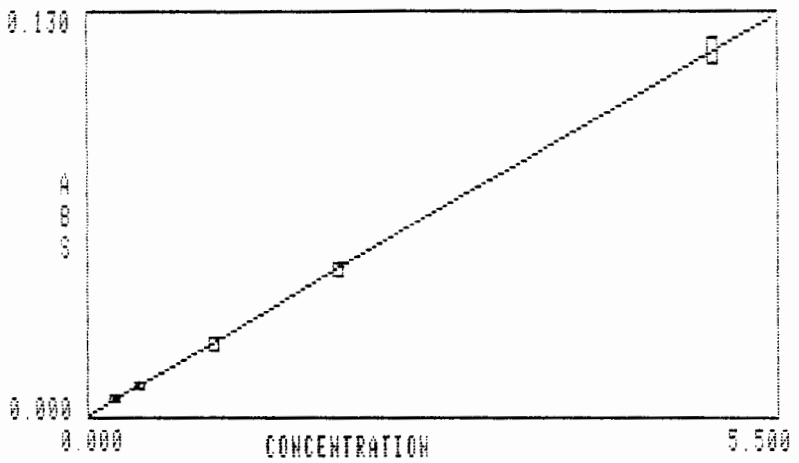
OPERATOR smm
DATE 10.2.98
BATCH NO. 000744

Dig 559 10-2-98
Run 744 10-2-98

PROGRAM 26 Hg

INSTRUMENT MODE	ABSORBANCE
CALIBRATION MODE	CONCENTRATION
MEASUREMENT MODE	INTEGRATION
LAMP POSITION	4
LAMP CURRENT (mA)	4
SLIT WIDTH (nm)	0.5
WAVELENGTH (nm)	253.7
FLAME	AIR-ACETYLENE
SAMPLE INTRODUCTION	AUTO NORMAL
DELAY TIME	70
TIME CONSTANT	0.05
MEASUREMENT TIME (sec)	1.0
REPLICATES	3
BACKGROUND CORRECTION	OFF
OXIDANT FLOW	3.5
ACETYLENE FLOW	1.5
RINSE RATE	1
RINSE TIME (sec)	65.0
RECALIBRATION RATE	0
RESLOPE RATE	0

SAMPLE	CONC	%RSD	MEAN ABS	READINGS		
BLANK	0.000		0.001	0.001	0.001	0.000
BLANK	0.000		-0.002	-0.002	-0.002	-0.002
STANDARD 1	0.200	6.2	0.005	0.005	0.005	0.005
STANDARD 2	0.400	0.9	0.010	0.010	0.009	0.010
STANDARD 3	1.000	2.4	0.023	0.023	0.023	0.024
STANDARD 4	2.000	2.3	0.048	0.046	0.048	0.048
STANDARD 5	5.000	2.5	0.118	0.115	0.119	0.121



SAMPLE	CONC	%RSD	MEAN ABS	READINGS		
	0.011	99.9	0.000	-0.000	0.001	0.000
.0 ICV	1.099 110%	4.1	0.026	0.024	0.026	0.027
0.0 ICB	0.049 ND	51.7	0.001	0.000	0.002	0.002
0.2	0.264	8.5	0.006	0.006	0.007	0.007
10.2.559	1.004	3.9	0.023	0.023	0.023	0.024
10.2	0.025	62.2	0.001	0.000	0.001	0.001
84524.8860	0.049	25.5	0.001	0.001	0.001	0.001
84492.8739	0.003	99.9	0.000	-0.001	0.000	0.001
8740	0.038	28.7	0.001	0.001	0.001	0.001
8741	0.069	11.8	0.002	0.002	0.002	0.001
8742	0.062	15.0	0.002	0.002	0.002	0.001
8743	0.072	23.4	0.002	0.002	0.002	0.001
	0.052	11.6	0.001	0.001	0.001	0.001
1.0	1.151	2.4	0.027	0.026	0.027	0.028
0.0	0.069	23.1	0.002	0.001	0.002	0.002
8744.2.1	1.026	2.8	0.024	0.023	0.024	0.025
8745.2.2	1.075	0.9	0.025	0.025	0.025	0.025
8746	0.085	18.0	0.002	0.003	0.002	0.002
001	0.090	5.5	0.002	0.002	0.002	0.002
20	0.059	40.2	0.001	0.002	0.001	0.002
21CCV	1.154	3.4	0.027	0.026	0.027	0.028
BLANK	0.000		0.002	0.003	0.002	0.002
BLANK	0.000		-0.000	-0.000	-0.000	-0.000
1.0ICV	1.070 107%	3.6	0.025	0.024	0.025	0.026
.0ICB	0.004 ND	99.9	0.000	-0.000	0.000	0.001
.2 CRA	0.219	4.9	0.005	0.005	0.005	0.006
10.2.559 PS	1.032 103%	2.7	0.024	0.023	0.024	0.025
.0.2 PB	0.036 ND	24.7	0.001	0.001	0.001	0.001
84524.8860	0.001	99.9	0.000	0.000	0.000	-0.001
84492.8739	0.015	64.5	0.000	0.000	0.000	0.001
8740	0.017	65.4	0.000	0.001	0.001	0.000
8741	0.016	99.9	0.000	-0.000	0.000	0.001
8742	0.006	99.9	0.000	0.001	-0.000	-0.000

Rerun - Failed QC

8740	0.017	65.4	0.000	0.001	0.001	0.000
8741	0.016	99.9	0.000	-0.000	0.000	0.001
8742	0.006	99.9	0.000	0.001	-0.000	-0.000
8743	-0.019	70.5	-0.000	-0.001	-0.000	-0.001

SAMPLE	CONC	%RSD	MEAN ABS	READINGS		
	-0.021	81.5	-0.001	-0.000	-0.001	-0.000
1.0 CCV	1.080 108%	3.1	0.025	0.025	0.025	0.026
0.0 CCB	0.009 ND	88.1	0.000	0.000	0.000	0.000
8744.2.1 MS	0.975 98%	1.6	0.023	0.023	0.023	0.023
8745.2.2 MSD	1.017 102%	3.4	0.024	0.023	0.023	0.025
8746	0.009	99.9	0.000	0.001	-0.000	0.000
~~001~~84547-8910	0.038	9.3	0.001	0.001	0.001	0.001
20 Rinse	0.002	0.0	0.000	0.000	0.000	0.000
21 CCV	1.080 108%	3.4	0.025	0.024	0.025	0.026
22 CCB	0.017 ND	14.0	0.000	0.001	0.000	0.000
23	-0.002	99.9	-0.000	-0.000	0.000	-0.000

METHOD 8260

QUALITY CONTROL SUMMARY

CT&E Environmental Services, Inc. - Anatech Division

WATER VOLATILE SURROGATE RECOVERY

Method: SW-846 Mtd. 8260B
Instrument HP 5972 GC/MS - L

Date Reported: 10/15/98
Analyst: PG
Date Analyzed: 10/01/98
Analytical Batch: L01OCT98

	LABORATORY SAMPLE ID	S1 (BFM)	S2 (TOL)	S3 (BFB)	TOT OUT
1	84464-8677	108	102	99	
2	84464-8678	105	104	99	
3	84464-8679	109	102	99	
4	Method Blank	100	98	98	
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

	QC LIMITS*
S1 (BFM) = Dibromofluoromethane	81-117
S2 (TOL) = Toluene-d8	87-114
S3 (BFB) = Bromofluorobenzene	84-108

* Laboratory established, updated 7/15/96
\+ Values outside of QC limits
D - Surrogate diluted out

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER VOLATILE SURROGATE RECOVERY

Method: SW-846 Mtd. 8260B
Instrument HP 5972 GC/MS - L

Date Reported: 10/15/98
Analyst: PG
Date Analyzed: 10/02/98
Analytical Batch: L02OCT98

	LABORATORY SAMPLE ID	S1 (BFM)	S2 (TOL)	S3 (BFB)	TOT OUT
1	84464-8680	108	102	99	
2	84464-8681	112	104	101	
3	84464-8682	111	104	101	
4	84464-8683	113	102	101	
5	Method Blank	108	99	101	
6					
7					
8					
9					
10					
11					
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22					
23					
24					
25					

	QC LIMITS*
S1 (BFM) = Dibromofluoromethane	81-117
S2 (TOL) = Toluene-d8	87-114
S3 (BFB) = Bromofluorobenzene	84-108

* Laboratory established, updated 7/15/96
\+ Values outside of QC limits
D - Surrogate diluted out

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER VOLATILE SURROGATE RECOVERY

Method: SW-846 Mtd. 8260B
Instrument HP 5972 GC/MS - H

Date Reported: 10/15/98
Analyst: PG
Date Analyzed: 10/02/98
Analytical Batch: H02OCT98

	LABORATORY SAMPLE ID	S1 (BFM)	S2 (TOL)	S3 (BFB)	TOT OUT
1	84492-8739	106	90	91	
2	84492-8740	109	92	92	
3	Method Blank	98	95	85	
4					
5					
6					
7					
8					
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24					
25					

	QC LIMITS*
S1 (BFM) = Dibromofluoromethane	81-117
S2 (TOL) = Toluene-d8	87-114
S3 (BFB) = Bromofluorobenzene	84-108

* Laboratory established, updated 7/15/96
\+ Values outside of QC limits
D - Surrogate diluted out

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER VOLATILE SURROGATE RECOVERY

Method: SW-846 Mtd. 8260B
Instrument HP 5972 GC/MS - L

Date Reported: 10/15/98
Analyst: PG
Date Analyzed: 10/05/98
Analytical Batch: L05OCT98

	LABORATORY SAMPLE ID	S1 (BFM)	S2 (TOL)	S3 (BFB)	TOT OUT
1	84492-8741	107	100	98	
2	84492-8742	111	104	100	
3	84492-8743	111	108	98	
4	84492-8744	111	108	100	
5	84492-8745	107	102	100	
6	84492-8746	115	108	101	
7	84492-8747	113	108	100	
8	Method Blank	109	103	97	
9					
10					
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25					

	QC LIMITS*
S1 (BFM) = Dibromofluoromethane	81-117
S2 (TOL) = Toluene-d8	87-114
S3 (BFB) = Bromofluorobenzene	84-108

* Laboratory established, updated 7/15/96
\+ Values outside of QC limits
D - Surrogate diluted out

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER VOLATILE LABORATORY CONTROL SAMPLE RECOVERY

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - L
LCS File Name: 10LCS01A

Date Reported: 10/16/98
Analyst: PG
Date Analyzed: 10/1/98
Analytical Batch: L01OCT98

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	LCS CONCENTRATION (µg/L)	LCS % REC. #	QC LIMITS* REC.
1,1-Dichloroethene	50	0	43	86%	75-125
Benzene	50	0	47	94%	75-125
Trichloroethene	50	0	45	90%	75-123
Toluene	50	0	47	94%	74-125
Chlorobenzene	50	0	49	98%	75-125

*Laboratory established, updated 3/12/97

Values outside of QC limits

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER VOLATILE LABORATORY CONTROL SAMPLE RECOVERY

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - L
LCS File Name: 10LCS02A

Date Reported: 10/16/98
Analyst: PG
Date Analyzed: 10/2/98
Analytical Batch: L02OCT98

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	LCS CONCENTRATION (µg/L)	LCS % REC. #	QC LIMITS* REC.
1,1-Dichloroethene	50	0	44	88%	75-125
Benzene	50	0	42	84%	75-125
Trichloroethene	50	0	40	80%	75-123
Toluene	50	0	41	82%	74-125
Chlorobenzene	50	0	43	86%	75-125

*Laboratory established, updated 3/12/97

Values outside of QC limits

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER VOLATILE LABORATORY CONTROL SAMPLE RECOVERY

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - H
LCS File Name: 10LCS02A

Date Reported: 10/19/98
Analyst: PG
Date Analyzed: 10/2/98
Analytical Batch: H02OCT98

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	LCS CONCENTRATION (µg/L)	LCS % REC. #	QC LIMITS* REC.
1,1-Dichloroethene	50	0	41	82%	75-125
Benzene	50	0	41	82%	75-125
Trichloroethene	50	0	42	84%	75-123
Toluene	50	0	41	82%	74-125
Chlorobenzene	50	0	45	90%	75-125

*Laboratory established, updated 3/12/97

Values outside of QC limits

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER VOLATILE LABORATORY CONTROL SAMPLE RECOVERY

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - L
LCS File Name: 10LCS05A

Date Reported: 10/16/98
Analyst: PG
Date Analyzed: 10/5/98
Analytical Batch: L05OCT98

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	LCS CONCENTRATION (µg/L)	LCS % REC. #	QC LIMITS* REC.
1,1-Dichloroethene	50	0	53	106%	75-125
Benzene	50	0	47	94%	75-125
Trichloroethene	50	0	45	90%	75-123
Toluene	50	0	47	94%	74-125
Chlorobenzene	50	0	48	96%	75-125

*Laboratory established, updated 3/12/97

Values outside of QC limits

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER VOLATILE MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

Method: SW-846 Mtd. 8260B
Instrument: HP 5972 GC/MS - L
MS File Name: 8707MS
MSD File Name: 8707MSD

Date Reported: 10/16/98
Analyst: PG
Date Analyzed: 10/2/98
Analytical Batch: L02OCT98

Spiked Sample ID: 84475-8707

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC. #	QC LIMITS* REC.
1,1-Dichloroethene	50	0	58	116%	75-125
Benzene	50	0	47	94%	75-125
Trichloroethene	50	0	45	90%	75-123
Toluene	50	0	47	94%	74-125
Chlorobenzene	50	0	47	94%	75-125

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC. #	% RPD	QC LIMITS* REC.
1,1-Dichloroethene	50	51	102%	13%	75-125
Benzene	50	47	94%	0%	75-125
Trichloroethene	50	44	88%	2%	75-123
Toluene	50	46	92%	2%	74-125
Chlorobenzene	50	49	98%	4%	75-125

*Laboratory established, updated 3/12/97

Values outside of QC limits

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER VOLATILE MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

Method: SW-846 Mtd. 8260B
Instrument: HP 5972 GC/MS - H
MS File Name: 8693MS
MSD File Name: 8693MSD

Date Reported: 10/19/98
Analyst: PG
Date Analyzed: 10/3/98
Analytical Batch: H02OCT9

Spiked Sample ID: 84468-8693

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC. #	QC LIMITS* REC.
1,1-Dichloroethene	50	0	43	86%	75-125
Benzene	50	0	46	92%	75-125
Trichloroethene	50	0	50	100%	75-123
Toluene	50	0	49	98%	74-125
Chlorobenzene	50	0	52	104%	75-125

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC. #	% RPD	QC LIMITS* REC.
1,1-Dichloroethene	50	48	96%	11%	75-125
Benzene	50	48	96%	4%	75-125
Trichloroethene	50	50	100%	0%	75-123
Toluene	50	49	98%	0%	74-125
Chlorobenzene	50	53	106%	2%	75-125

*Laboratory established, updated 3/12/97

Values outside of QC limits

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER VOLATILE MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

Method: SW-846 Mtd. 8260B
Instrument: HP 5972 GC/MS - L
MS File Name: 492-8744
MSD File Name: 492-8745

Date Reported: 10/16/98
Analyst: PG
Date Analyzed: 10/5/98
Analytical Batch: L05OCT98

Spiked Sample ID: 84492-8743

COMPOUND	SPIKE ADDED (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC. #	QC LIMITS* REC.
1,1-Dichloroethene	50	0	62	124%	75-125
Benzene	50	0	47	94%	75-125
Trichloroethene	50	0	46	92%	75-123
Toluene	50	0	48	96%	74-125
Chlorobenzene	50	0	48	96%	75-125

COMPOUND	SPIKE ADDED (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC. #	% RPD	QC LIMITS* REC.
1,1-Dichloroethene	50	58	116%	7%	75-125
Benzene	50	48	96%	2%	75-125
Trichloroethene	50	46	92%	0%	75-123
Toluene	50	48	96%	0%	74-125
Chlorobenzene	50	49	98%	2%	75-125

*Laboratory established, updated 3/12/97

Values outside of QC limits

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER VOLATILE METHOD BLANK SUMMARY

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - L

Date Reported: 10/16/98
Analyst: PG
Date Analyzed: 10/01/98
Analytical Batch: L01OCT98

MB File Name: 10BLK01B

COMPOUND	BLANK CONC. (µg/L)	DL (µg/L)
Dichlorodifluoromethane	ND	1
Chloromethane	ND	1
Vinyl chloride	ND	1
Bromomethane	ND	1
Chloroethane	ND	1
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
Methylene chloride	ND	5
t-1,2-Dichloroethene	ND	1
MTBE	ND	1
1,1-Dichloroethane	ND	1
2,2-Dichloropropane	ND	1
c-1,2-Dichloroethene	ND	1
Bromochloromethane	ND	1
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
2-Chloroethylvinylether	ND	1
Carbon tetrachloride	ND	1
1,1-Dichloropropene	ND	1
Benzene	ND	1
1,2-Dichloroethane	ND	1
Trichloroethene	ND	1
1,2-Dichloropropane	ND	1
Dibromomethane	ND	1
Bromodichloromethane	ND	1
c-1,3-Dichloropropene	ND	1
Toluene	ND	1
t-1,3-Dichloropropene	ND	1
1,1,2-Trichloroethane	ND	1
1,2-Dibromoethane	ND	1
Tetrachloroethene	ND	1
1,3-Dichloropropane	ND	1
Dibromochloromethane	ND	1
Chlorobenzene	ND	1

COMPOUND	BLANK CONC (µg/L)	DL (µg/L)
1,1,1,2-Tetrachloroethane	ND	1
Ethylbenzene	ND	1
p&m-Xylene	ND	2
o-Xylene	ND	1
Styrene	ND	1
Bromoform	ND	1
Isopropylbenzene	ND	1
Bromobenzene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,2,3-Trichloropropane	ND	1
n-Propylbenzene	ND	1
2-Chlorotoluene	ND	1
4-Chlorotoluene	ND	1
1,3,5-Trimethylbenzene	ND	1
tert-Butylbenzene	ND	1
1,2,4-Trimethylbenzene	ND	1
sec-Butylbenzene	ND	1
1,3-Dichlorobenzene	ND	1
4-Isopropyltoluene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1
n-Butylbenzene	ND	1
1,2-Dibromo-3-chloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
Hexachlorobutadiene	ND	1
Naphthalene	ND	1
1,2,3-Trichlorobenzene	ND	1
Ethyl Ether	ND	1
Benzyl chloride	ND	5
2-Butanone (MEK)	ND	5
4-Methyl-2-pentanone (MIBK)	ND	5
2-Hexanone	ND	5
Acetone	ND	5

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER VOLATILE METHOD BLANK SUMMARY

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - L

Date Reported: 10/16/98
Analyst: PG
Date Analyzed: 10/02/98
Analytical Batch: L02OCT98

MB File Name: 10BLK02B

COMPOUND	BLANK CONC. (µg/L)	DL (µg/L)
Dichlorodifluoromethane	ND	1
Chloromethane	ND	1
Vinyl chloride	ND	1
Bromomethane	ND	1
Chloroethane	ND	1
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
Methylene chloride	ND	5
t-1,2-Dichloroethene	ND	1
MTBE	ND	1
1,1-Dichloroethane	ND	1
2,2-Dichloropropane	ND	1
c-1,2-Dichloroethene	ND	1
Bromochloromethane	ND	1
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
2-Chloroethylvinylether	ND	1
Carbon tetrachloride	ND	1
1,1-Dichloropropene	ND	1
Benzene	ND	1
1,2-Dichloroethane	ND	1
Trichloroethene	ND	1
1,2-Dichloropropane	ND	1
Dibromomethane	ND	1
Bromodichloromethane	ND	1
c-1,3-Dichloropropene	ND	1
Toluene	ND	1
t-1,3-Dichloropropene	ND	1
1,1,2-Trichloroethane	ND	1
1,2-Dibromoethane	ND	1
Tetrachloroethene	ND	1
1,3-Dichloropropane	ND	1
Dibromochloromethane	ND	1
Chlorobenzene	ND	1

COMPOUND	BLANK CONC (µg/L)	DL (µg/L)
1,1,1,2-Tetrachloroethane	ND	1
Ethylbenzene	ND	1
p&m-Xylene	ND	2
o-Xylene	ND	1
Styrene	ND	1
Bromoform	ND	1
Isopropylbenzene	ND	1
Bromobenzene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,2,3-Trichloropropane	ND	1
n-Propylbenzene	ND	1
2-Chlorotoluene	ND	1
4-Chlorotoluene	ND	1
1,3,5-Trimethylbenzene	ND	1
tert-Butylbenzene	ND	1
1,2,4-Trimethylbenzene	ND	1
sec-Butylbenzene	ND	1
1,3-Dichlorobenzene	ND	1
4-Isopropyltoluene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1
n-Butylbenzene	ND	1
1,2-Dibromo-3-chloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
Hexachlorobutadiene	ND	1
Naphthalene	ND	1
1,2,3-Trichlorobenzene	ND	1
Ethyl Ether	ND	1
Benzyl chloride	ND	5
2-Butanone (MEK)	ND	5
4-Methyl-2-pentanone (MIBK)	ND	5
2-Hexanone	ND	5
Acetone	ND	5

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER VOLATILE METHOD BLANK SUMMARY

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - H

Date Reported: 10/19/98
Analyst: PG
Date Analyzed: 10/02/98
Analytical Batch: H02OCT98

MB File Name: 10BLK02A

COMPOUND	BLANK CONC. (µg/L)	DL (µg/L)
Dichlorodifluoromethane	ND	1
Chloromethane	ND	1
Vinyl chloride	ND	1
Bromomethane	ND	1
Chloroethane	ND	1
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
Methylene chloride	ND	5
t-1,2-Dichloroethene	ND	1
MTBE	ND	1
1,1-Dichloroethane	ND	1
2,2-Dichloropropane	ND	1
c-1,2-Dichloroethene	ND	1
Bromochloromethane	ND	1
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
2-Chloroethylvinylether	ND	1
Carbon tetrachloride	ND	1
1,1-Dichloropropene	ND	1
Benzene	ND	1
1,2-Dichloroethane	ND	1
Trichloroethene	ND	1
1,2-Dichloropropane	ND	1
Dibromomethane	ND	1
Bromodichloromethane	ND	1
c-1,3-Dichloropropene	ND	1
Toluene	ND	1
t-1,3-Dichloropropene	ND	1
1,1,2-Trichloroethane	ND	1
1,2-Dibromoethane	ND	1
Tetrachloroethene	ND	1
1,3-Dichloropropane	ND	1
Dibromochloromethane	ND	1
Chlorobenzene	ND	1

COMPOUND	BLANK CONC (µg/L)	DL (µg/L)
1,1,1,2-Tetrachloroethane	ND	1
Ethylbenzene	ND	1
p&m-Xylene	ND	2
o-Xylene	ND	1
Styrene	ND	1
Bromoform	ND	1
Isopropylbenzene	ND	1
Bromobenzene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,2,3-Trichloropropane	ND	1
n-Propylbenzene	ND	1
2-Chlorotoluene	ND	1
4-Chlorotoluene	ND	1
1,3,5-Trimethylbenzene	ND	1
tert-Butylbenzene	ND	1
1,2,4-Trimethylbenzene	ND	1
sec-Butylbenzene	ND	1
1,3-Dichlorobenzene	ND	1
4-Isopropyltoluene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1
n-Butylbenzene	ND	1
1,2-Dibromo-3-chloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
Hexachlorobutadiene	ND	1
Naphthalene	ND	1
1,2,3-Trichlorobenzene	ND	1
Ethyl Ether	ND	1
Benzyl chloride	ND	5
2-Butanone (MEK)	ND	5
4-Methyl-2-pentanone (MIBK)	ND	5
2-Hexanone	ND	5
Acetone	ND	5

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER VOLATILE METHOD BLANK SUMMARY

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - L

Date Reported: 10/16/98
Analyst: PG
Date Analyzed: 10/05/98
Analytical Batch: L05OCT98

MB File Name: 10BLK05B

COMPOUND	BLANK CONC. (µg/L)	DL (µg/L)
Dichlorodifluoromethane	ND	1
Chloromethane	ND	1
Vinyl chloride	ND	1
Bromomethane	ND	1
Chloroethane	ND	1
Trichlorofluoromethane	ND	1
1,1-Dichloroethene	ND	1
Methylene chloride	ND	5
t-1,2-Dichloroethene	ND	1
MTBE	ND	1
1,1-Dichloroethane	ND	1
2,2-Dichloropropane	ND	1
c-1,2-Dichloroethene	ND	1
Bromochloromethane	ND	1
Chloroform	ND	1
1,1,1-Trichloroethane	ND	1
2-Chloroethylvinylether	ND	1
Carbon tetrachloride	ND	1
1,1-Dichloropropene	ND	1
Benzene	ND	1
1,2-Dichloroethane	ND	1
Trichloroethene	ND	1
1,2-Dichloropropane	ND	1
Dibromomethane	ND	1
Bromodichloromethane	ND	1
c-1,3-Dichloropropene	ND	1
Toluene	ND	1
t-1,3-Dichloropropene	ND	1
1,1,2-Trichloroethane	ND	1
1,2-Dibromoethane	ND	1
Tetrachloroethene	ND	1
1,3-Dichloropropane	ND	1
Dibromochloromethane	ND	1
Chlorobenzene	ND	1

COMPOUND	BLANK CONC (µg/L)	DL (µg/L)
1,1,1,2-Tetrachloroethane	ND	1
Ethylbenzene	ND	1
p&m-Xylene	ND	2
o-Xylene	ND	1
Styrene	ND	1
Bromoform	ND	1
Isopropylbenzene	ND	1
Bromobenzene	ND	1
1,1,2,2-Tetrachloroethane	ND	1
1,2,3-Trichloropropane	ND	1
n-Propylbenzene	ND	1
2-Chlorotoluene	ND	1
4-Chlorotoluene	ND	1
1,3,5-Trimethylbenzene	ND	1
tert-Butylbenzene	ND	1
1,2,4-Trimethylbenzene	ND	1
sec-Butylbenzene	ND	1
1,3-Dichlorobenzene	ND	1
4-Isopropyltoluene	ND	1
1,4-Dichlorobenzene	ND	1
1,2-Dichlorobenzene	ND	1
n-Butylbenzene	ND	1
1,2-Dibromo-3-chloropropane	ND	1
1,2,4-Trichlorobenzene	ND	1
Hexachlorobutadiene	ND	1
Naphthalene	ND	1
1,2,3-Trichlorobenzene	ND	1
Ethyl Ether	ND	1
Benzyl chloride	ND	5
2-Butanone (MEK)	ND	5
4-Methyl-2-pentanone (MIBK)	ND	5
2-Hexanone	ND	5
Acetone	ND	5

Comments:

CT&E Environmental Services, Inc. - Anatech Division

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BFB

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - L

Tune File Name: 09BFB29B

Date Reported: 10/20/98
Analyst: PG
Date Analyzed: 09/29/98
Analytical Batch: L29SEP98

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0-40.0% of mass 95	22.5
75	30.0-60.0% of mass 95	50.2
95	Base peak, 100% relative abundance	100.0
96	5.0-9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	84.8
175	5.0-9.0% of mass 174	7.3
176	Greater than 95.0%, but less than 101.0% of mass 174	98.3
177	5.0-9.0% of mass 176	6.8

Note: BFB is the tuning compound, bromofluorobenzene.

CT&E Environmental Services, Inc. - Anatech Division

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BFB

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - H

Date Reported: 10/20/98
Analyst: PG
Date Analyzed: 09/30/98
Analytical Batch: H30SEP98

Tune File Name: 9BFB30C

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0-40.0% of mass 95	18.3
75	30.0-60.0% of mass 95	45.4
95	Base peak, 100% relative abundance	100.0
96	5.0-9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	68.6
175	5.0-9.0% of mass 174	7.0
176	Greater than 95.0%, but less than 101.0% of mass 174	96.7
177	5.0-9.0% of mass 176	6.6

Note: BFB is the tuning compound, bromofluorobenzene.

CT&E Environmental Services, Inc. - Anatech Division

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BFB

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - L

Date Reported: 10/16/98
Analyst: PG
Date Analyzed: 10/01/98
Analytical Batch: L01OCT98

Tune File Name: 10BFB01A

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0-40.0% of mass 95	24.7
75	30.0-60.0% of mass 95	51.7
95	Base peak, 100% relative abundance	100.0
96	5.0-9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	82.3
175	5.0-9.0% of mass 174	7.4
176	Greater than 95.0%, but less than 101.0% of mass 174	98.4
177	5.0-9.0% of mass 176	6.9

Note: BFB is the tuning compound, bromofluorobenzene.

CT&E Environmental Services, Inc. - Anatech Division

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BFB

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - L

Date Reported: 10/16/98
Analyst: PG
Date Analyzed: 10/02/98

Tune File Name: 10BFB02A

Analytical Batch: L02OCT98

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0-40.0% of mass 95	24.5
75	30.0-60.0% of mass 95	50.9
95	Base peak, 100% relative abundance	100.0
96	5.0-9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	79.4
175	5.0-9.0% of mass 174	7.6
176	Greater than 95.0%, but less than 101.0% of mass 174	97.6
177	5.0-9.0% of mass 176	6.7

Note: BFB is the tuning compound, bromofluorobenzene.

CT&E Environmental Services, Inc. - Anatech Division

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BFB

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - H

Date Reported: 10/16/98
Analyst: PG
Date Analyzed: 10/02/98

Tune File Name: 10BFB02A

Analytical Batch: H02OCT98

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0-40.0% of mass 95	21.1
75	30.0-60.0% of mass 95	46.8
95	Base peak, 100% relative abundance	100.0
96	5.0-9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	71.9
175	5.0-9.0% of mass 174	7.0
176	Greater than 95.0%, but less than 101.0% of mass 174	96.4
177	5.0-9.0% of mass 176	6.6

Note: BFB is the tuning compound, bromofluorobenzene.

CT&E Environmental Services, Inc. - Anatech Division

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BFB

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - L

Tune File Name: 10BFB05A

Date Reported: 10/16/98
Analyst: PG
Date Analyzed: 10/05/98
Analytical Batch: L05OCT98

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0-40.0% of mass 95	25.4
75	30.0-60.0% of mass 95	51.7
95	Base peak, 100% relative abundance	100.0
96	5.0-9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	74.6
175	5.0-9.0% of mass 174	7.4
176	Greater than 95.0%, but less than 101.0% of mass 174	98.3
177	5.0-9.0% of mass 176	7.0

Note: BFB is the tuning compound, bromofluorobenzene.

CT&E Environmental Services, Inc. - Anatech Division

VOLATILE CONTINUING CALIBRATION CHECK

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - L

CCC File Name:10CC01A

Date Reported: 10/16/98
Analyst: PG
Date Analyzed: 10/01/98
Analytical Batch: L01OCT98

COMPOUND	AvgRRF	CCRRF	%D	SPCC MIN RRF	CCC MAX %D
Dichlorodifluoromethane	0.698	0.332	52.4%		
Chloromethane	0.287	0.262	8.7%	0.1	
Vinyl chloride	0.244	0.197	19.3%		20
Bromomethane	0.080	0.075	6.3%		
Chloroethane	0.061	0.058	4.9%		
Trichlorofluoromethane	0.419	0.342	18.4%		
1,1-Dichloroethene	0.170	0.147	13.5%		20
Methylene chloride	0.284	0.422	-48.6%		
t-1,2-Dichloroethene	0.408	0.418	-2.5%		
MTBE	0.630	0.597	5.2%		
1,1-Dichloroethane	0.848	0.779	8.1%	0.1	
2,2-Dichloropropane	0.415	0.442	-6.5%		
c-1,2-Dichloroethene	0.430	0.427	0.7%		
Bromochloromethane	0.255	0.261	-2.4%		
Chloroform	0.827	0.782	5.4%		20
1,1,1-Trichloroethane	0.628	0.604	3.8%		
2-Chloroethylvinylether	0.123	0.108	12.2%		
Carbon tetrachloride	0.442	0.460	-4.1%		
1,1-Dichloropropene	0.435	0.469	-7.8%		
Benzene	1.083	1.065	1.7%		
1,2-Dichloroethane	0.453	0.411	9.3%		
Trichloroethene	0.413	0.389	5.8%		
1,2-Dichloropropane	0.353	0.337	4.5%		20
Dibromomethane	0.274	0.254	7.3%		
Bromodichloromethane	0.524	0.493	5.9%		
c-1,3-Dichloropropene	0.483	0.464	3.9%		
Toluene	0.673	0.636	5.5%		20
t-1,3-Dichloropropene	0.380	0.356	6.3%		
1,1,2-Trichloroethane	0.266	0.225	15.4%		
1,2-Dibromoethane	0.368	0.327	11.1%		
Tetrachloroethene	0.696	0.603	13.4%		
1,3-Dichloropropane	0.529	0.468	11.5%		
Dibromochloromethane	0.471	0.445	5.5%		
Chlorobenzene	0.915	0.903	1.3%	0.3	
1,1,1,2-Tetrachloroethane	0.388	0.416	-7.2%		
Ethylbenzene	1.462	1.413	3.4%		20

CT&E Environmental Services, Inc. - Anatech Division

VOLATILE CONTINUING CALIBRATION CHECK

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - L

CCC File Name:10CC01A

Date Reported: 10/16/98
Analyst: PG
Date Analyzed: 10/01/98
Analytical Batch: L01OCT98

COMPOUND	AvgRRF	CCRRF	%D	SPCC MIN RRF	CCC MAX %D
p&m-Xylene	0.506	0.54	-6.7%		
o-Xylene	0.517	0.55	-6.4%		
Styrene	0.836	0.909	-8.7%		
Bromoform	0.319	0.280	12.2%	0.1	
Isopropylbenzene	2.643	2.756	-4.3%		
Bromobenzene	0.804	0.830	-3.2%		
1,1,2,2-Tetrachloroethane	0.894	0.722	19.2%	0.3	
1,2,3-Trichloropropane	0.819	0.736	10.1%		
n-Propylbenzene	3.241	3.297	-1.7%		
2-Chlorotoluene	2.181	2.222	-1.9%		
4-Chlorotoluene	2.066	1.944	5.9%		
1,3,5-Trimethylbenzene	2.105	2.279	-8.3%		
tert-Butylbenzene	2.250	2.163	3.9%		
1,2,4-Trimethylbenzene	2.211	2.322	-5.0%		
sec-Butylbenzene	2.645	3.135	-18.5%		
1,3-Dichlorobenzene	1.389	1.358	2.2%		
4-Isopropyltoluene	2.564	2.605	-1.6%		
1,4-Dichlorobenzene	1.483	1.437	3.1%		
1,2-Dichlorobenzene	1.356	1.313	3.2%		
n-Butylbenzene	2.404	2.510	-4.4%		
1,2-Dibromo-3-chloropropane	0.139	0.142	-2.2%		
1,2,4-Trichlorobenzene	1.125	1.044	7.2%		
Hexachlorobutadiene	0.686	0.641	6.6%		
Naphthalene	2.160	1.738	19.5%		
1,2,3-Trichlorobenzene	1.035	0.951	8.1%		

Comments:

CT&E Environmental Services, Inc. - Anatech Division

VOLATILE CONTINUING CALIBRATION CHECK

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - L

CCC File Name:10CC02A

Date Reported: 10/16/98
Analyst: PG
Date Analyzed: 10/02/98
Analytical Batch: L02OCT98

COMPOUND	AvgRRF	CCRRF	%D	SPCC MIN RRF	CCC MAX %D
Dichlorodifluoromethane	0.698	0.274	60.7%		
Chloromethane	0.287	0.267	7.0%	0.1	
Vinyl chloride	0.244	0.231	5.3%		20
Bromomethane	0.080	0.079	1.3%		
Chloroethane	0.061	0.060	1.6%		
Trichlorofluoromethane	0.419	0.416	0.7%		
1,1-Dichloroethene	0.170	0.180	-5.9%		20
Methylene chloride	0.284	0.426	-50.0%		
t-1,2-Dichloroethene	0.408	0.424	-3.9%		
MTBE	0.630	0.576	8.6%		
1,1-Dichloroethane	0.848	0.821	3.2%	0.1	
2,2-Dichloropropane	0.415	0.440	-6.0%		
c-1,2-Dichloroethene	0.430	0.436	-1.4%		
Bromochloromethane	0.255	0.255	0.0%		
Chloroform	0.827	0.819	1.0%		20
1,1,1-Trichloroethane	0.628	0.643	-2.4%		
2-Chloroethylvinylether	0.123	0.112	8.9%		
Carbon tetrachloride	0.442	0.465	-5.2%		
1,1-Dichloropropene	0.435	0.476	-9.4%		
Benzene	1.083	1.073	0.9%		
1,2-Dichloroethane	0.453	0.428	5.5%		
Trichloroethene	0.413	0.400	3.1%		
1,2-Dichloropropane	0.353	0.358	-1.4%		20
Dibromomethane	0.274	0.258	5.8%		
Bromodichloromethane	0.524	0.503	4.0%		
c-1,3-Dichloropropene	0.483	0.470	2.7%		
Toluene	0.673	0.667	0.9%		20
t-1,3-Dichloropropene	0.380	0.368	3.2%		
1,1,2-Trichloroethane	0.266	0.234	12.0%		
1,2-Dibromoethane	0.368	0.331	10.1%		
Tetrachloroethene	0.696	0.584	16.1%		
1,3-Dichloropropane	0.529	0.471	11.0%		
Dibromochloromethane	0.471	0.425	9.8%		
Chlorobenzene	0.915	0.916	-0.1%	0.3	
1,1,1,2-Tetrachloroethane	0.388	0.400	-3.1%		
Ethylbenzene	1.462	1.437	1.7%		20

CT&E Environmental Services, Inc. - Anatech Division

VOLATILE CONTINUING CALIBRATION CHECK

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - L

CCC File Name:10CC02A

Date Reported: 10/16/98
Analyst: PG
Date Analyzed: 10/02/98
Analytical Batch: L02OCT98

COMPOUND	AvgRRF	CCRRF	%D	SPCC MIN RRF	CCC MAX %D
p&m-Xylene	0.506	0.546	-7.9%		
o-Xylene	0.517	0.559	-8.1%		
Styrene	0.836	0.924	-10.5%		
Bromoform	0.319	0.265	16.9%	0.1	
Isopropylbenzene	2.643	2.664	-0.8%		
Bromobenzene	0.804	0.787	2.1%		
1,1,2,2-Tetrachloroethane	0.894	0.693	22.5%	0.3	
1,2,3-Trichloropropane	0.819	0.711	13.2%		
n-Propylbenzene	3.241	3.248	-0.2%		
2-Chlorotoluene	2.181	2.153	1.3%		
4-Chlorotoluene	2.066	1.880	9.0%		
1,3,5-Trimethylbenzene	2.105	2.178	-3.5%		
tert-Butylbenzene	2.250	2.029	9.8%		
1,2,4-Trimethylbenzene	2.211	2.246	-1.6%		
sec-Butylbenzene	2.645	3.087	-16.7%		
1,3-Dichlorobenzene	1.389	1.316	5.3%		
4-Isopropyltoluene	2.564	2.513	2.0%		
1,4-Dichlorobenzene	1.483	1.391	6.2%		
1,2-Dichlorobenzene	1.356	1.250	7.8%		
n-Butylbenzene	2.404	2.492	-3.7%		
1,2-Dibromo-3-chloropropane	0.139	0.127	8.6%		
1,2,4-Trichlorobenzene	1.125	0.995	11.6%		
Hexachlorobutadiene	0.686	0.614	10.5%		
Naphthalene	2.160	1.640	24.1%		
1,2,3-Trichlorobenzene	1.035	0.915	11.6%		

Comments:

CT&E Environmental Services, Inc. - Anatech Division

VOLATILE CONTINUING CALIBRATION CHECK

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - H

CCC File Name:10CC02A

Date Reported: 10/19/98
Analyst: PG
Date Analyzed: 10/02/98
Analytical Batch: H02OCT98

COMPOUND	AvgRRF	CCRRF	%D	SPCC MIN RRF	CCC MAX %D
Dichlorodifluoromethane	0.641	0.252	60.7%		
Chloromethane	1.759	0.678	61.5%	0.1	
Vinyl chloride	0.792	0.795	-0.4%		20
Bromomethane	0.533	0.523	1.9%		
Chloroethane	0.442	0.468	-5.9%		
Trichlorofluoromethane	0.806	0.786	2.5%		
1,1-Dichloroethene	0.429	0.400	6.8%		20
Methylene chloride	0.770	0.475	38.3%		
t-1,2-Dichloroethene	0.486	0.477	1.9%		
MTBE	1.102	1.031	6.4%		
1,1-Dichloroethane	1.087	0.968	10.9%	0.1	
2,2-Dichloropropane	0.671	0.635	5.4%		
c-1,2-Dichloroethene	0.503	0.493	2.0%		
Bromochloromethane	0.243	0.236	2.9%		
Chloroform	0.849	0.772	9.1%		20
1,1,1-Trichloroethane	0.684	0.607	11.3%		
2-Chloroethylvinylether	0.152	0.154	-1.3%		
Carbon tetrachloride	0.335	0.312	6.9%		
1,1-Dichloropropene	0.421	0.444	-5.5%		
Benzene	1.283	1.237	3.6%		
1,2-Dichloroethane	0.369	0.316	14.4%		
Trichloroethene	0.364	0.351	3.6%		
1,2-Dichloropropane	0.404	0.392	3.0%		20
Dibromomethane	0.206	0.194	5.8%		
Bromodichloromethane	0.407	0.387	4.9%		
c-1,3-Dichloropropene	0.473	0.460	2.7%		
Toluene	0.713	0.674	5.5%		20
t-1,3-Dichloropropene	0.389	0.382	1.8%		
1,1,2-Trichloroethane	0.242	0.230	5.0%		
1,2-Dibromoethane	0.272	0.276	-1.5%		
Tetrachloroethene	0.568	0.563	0.9%		
1,3-Dichloropropane	0.527	0.540	-2.5%		
Dibromochloromethane	0.313	0.321	-2.6%		
Chlorobenzene	0.867	0.905	-4.4%	0.3	
1,1,1,2-Tetrachloroethane	0.311	0.341	-9.6%		
Ethylbenzene	1.457	1.638	-12.4%		20

CT&E Environmental Services, Inc. - Anatech Division

VOLATILE CONTINUING CALIBRATION CHECK

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - H

CCC File Name:10CC02A

Date Reported: 10/19/98
Analyst: PG
Date Analyzed: 10/02/98
Analytical Batch: H02OCT98

COMPOUND	AvgRRF	CCRRF	%D	SPCC MIN RRF	CCC MAX %D
p&m-Xylene	0.554	0.63	-13.7%		
o-Xylene	0.554	0.612	-10.5%		
Styrene	0.871	1.039	-19.3%		
Bromoform	0.184	0.176	4.3%	0.1	
Isopropylbenzene	2.769	2.776	-0.3%		
Bromobenzene	0.712	0.671	5.8%		
1,1,2,2-Tetrachloroethane	0.785	0.607	22.7%	0.3	
1,2,3-Trichloropropane	0.834	0.627	24.8%		
n-Propylbenzene	3.770	3.736	0.9%		
2-Chlorotoluene	2.390	2.352	1.6%		
4-Chlorotoluene	1.975	1.897	3.9%		
1,3,5-Trimethylbenzene	2.332	2.306	1.1%		
tert-Butylbenzene	2.360	2.173	7.9%		
1,2,4-Trimethylbenzene	2.327	2.358	-1.3%		
sec-Butylbenzene	3.319	3.482	-4.9%		
1,3-Dichlorobenzene	1.328	1.348	-1.5%		
4-Isopropyltoluene	2.755	2.744	0.4%		
1,4-Dichlorobenzene	1.376	1.408	-2.3%		
1,2-Dichlorobenzene	1.371	1.367	0.3%		
n-Butylbenzene	2.678	3.098	-15.7%		
1,2-Dibromo-3-chloropropane	0.122	0.105	13.9%		
1,2,4-Trichlorobenzene	0.439	0.696	-58.5%		
Hexachlorobutadiene	0.445	0.498	-11.9%		
Naphthalene	0.872	1.177	-35.0%		
1,2,3-Trichlorobenzene	0.289	0.461	-59.5%		

Comments:

CT&E Environmental Services, Inc. - Anatech Division

VOLATILE CONTINUING CALIBRATION CHECK

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - L

CCC File Name:10CC05A

Date Reported: 10/16/98
Analyst: PG
Date Analyzed: 10/05/98
Analytical Batch: L05OCT98

COMPOUND	AvgRRF	CCRRF	%D	SPCC MIN RRF	CCC MAX %D
Dichlorodifluoromethane	0.698	0.549	21.3%		
Chloromethane	0.287	0.384	-33.8%	0.1	
Vinyl chloride	0.244	0.292	-19.7%		20
Bromomethane	0.080	0.096	-20.0%		
Chloroethane	0.061	0.087	-42.6%		
Trichlorofluoromethane	0.419	0.505	-20.5%		
1,1-Dichloroethene	0.170	0.200	-17.6%		20
Methylene chloride	0.284	0.410	-44.4%		
t-1,2-Dichloroethene	0.408	0.420	-2.9%		
MTBE	0.630	0.559	11.3%		
1,1-Dichloroethane	0.848	0.826	2.6%	0.1	
2,2-Dichloropropane	0.415	0.457	-10.1%		
c-1,2-Dichloroethene	0.430	0.423	1.6%		
Bromochloromethane	0.255	0.241	5.5%		
Chloroform	0.827	0.799	3.4%		20
1,1,1-Trichloroethane	0.628	0.656	-4.5%		
2-Chloroethylvinylether	0.123	0.119	3.3%		
Carbon tetrachloride	0.442	0.471	-6.6%		
1,1-Dichloropropene	0.435	0.476	-9.4%		
Benzene	1.083	1.044	3.6%		
1,2-Dichloroethane	0.453	0.423	6.6%		
Trichloroethene	0.413	0.385	6.8%		
1,2-Dichloropropane	0.353	0.356	-0.8%		20
Dibromomethane	0.274	0.255	6.9%		
Bromodichloromethane	0.524	0.483	7.8%		
c-1,3-Dichloropropene	0.483	0.469	2.9%		
Toluene	0.673	0.642	4.6%		20
t-1,3-Dichloropropene	0.380	0.366	3.7%		
1,1,2-Trichloroethane	0.266	0.229	13.9%		
1,2-Dibromoethane	0.368	0.320	13.0%		
Tetrachloroethene	0.696	0.520	25.3%		
1,3-Dichloropropane	0.529	0.463	12.5%		
Dibromochloromethane	0.471	0.405	14.0%		
Chlorobenzene	0.915	0.896	2.1%	0.3	
1,1,1,2-Tetrachloroethane	0.388	0.382	1.5%		
Ethylbenzene	1.462	1.411	3.5%		20

CT&E Environmental Services, Inc. - Anatech Division

VOLATILE CONTINUING CALIBRATION CHECK

Method: SW-846 Mtd. 8260A
Instrument: HP 5972 GC/MS - L

CCC File Name:10CC05A

Date Reported: 10/16/98
Analyst: PG
Date Analyzed: 10/05/98
Analytical Batch: L05OCT98

COMPOUND	AvgRRF	CCRRF	%D	SPCC MIN RRF	CCC MAX %D
p&m-Xylene	0.506	0.544	-7.5%		
o-Xylene	0.517	0.547	-5.8%		
Styrene	0.836	0.908	-8.6%		
Bromoform	0.319	0.259	18.8%	0.1	
Isopropylbenzene	2.643	2.574	2.6%		
Bromobenzene	0.804	0.761	5.3%		
1,1,2,2-Tetrachloroethane	0.894	0.688	23.0%	0.3	
1,2,3-Trichloropropane	0.819	0.744	9.2%		
n-Propylbenzene	3.241	3.220	0.6%		
2-Chlorotoluene	2.181	2.154	1.2%		
4-Chlorotoluene	2.066	1.852	10.4%		
1,3,5-Trimethylbenzene	2.105	2.160	-2.6%		
tert-Butylbenzene	2.250	2.206	2.0%		
1,2,4-Trimethylbenzene	2.211	2.182	1.3%		
sec-Butylbenzene	2.645	3.005	-13.6%		
1,3-Dichlorobenzene	1.389	1.290	7.1%		
4-Isopropyltoluene	2.564	2.463	3.9%		
1,4-Dichlorobenzene	1.483	1.376	7.2%		
1,2-Dichlorobenzene	1.356	1.219	10.1%		
n-Butylbenzene	2.404	2.456	-2.2%		
1,2-Dibromo-3-chloropropane	0.139	0.131	5.8%		
1,2,4-Trichlorobenzene	1.125	1.007	10.5%		
Hexachlorobutadiene	0.686	0.625	8.9%		
Naphthalene	2.160	1.688	21.9%		
1,2,3-Trichlorobenzene	1.035	0.928	10.3%		

Comments:

COMMERCIAL TE: AND ENGINEERING

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): 10CC01A
Date Analyzed: 10/1/98
Instrument ID: L

SAMPLE ID	IS1 (PFB) AREA #	RT Time	IS2(DFB)AREA#	RT Time	IS3(CLB)AREA#	RT Time	IS4(DCB)AREA#	RT Time
CCAL	3722247	17.72	4695350	18.94	4169356	23.38	2289419	26.83
Method Blank	3911512	17.74	4959377	18.96	4175130	23.38	2070205	26.83
84464-8677	3462043	17.76	4429720	18.98	3801664	23.4	1907489	26.84
84464-8678	3752808	17.75	4743304	18.97	4133016	23.4	2082959	26.84
84464-8679	3517058	17.75	4592373	18.97	3892654	23.4	1984017	26.84

IS1(PFB) = Pentafluorobenzene
IS2(DFB) = 1,4-Difluorobenzene
IS3(CLB) = Chlorobenzene-d5
IS4(DCB) = 1,4-Dichlorobenzene-d4

COMMERCIAL TES AND ENGINEERING

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): 10CC02A
Date Analyzed: 10/2/98
Instrument ID: L

SAMPLE ID	IS1 (PFB) AREA #	RT Time	IS2(DFB)AREA#	RT Time	IS3(CLB)AREA#	RT Time	IS4(DCB)AREA#	RT Time
CCAL	3860641	17.74	4965062	18.96	4617657	23.38	2632764	26.84
Method Blank	3674698	17.74	4726832	18.98	3985059	23.4	2046739	26.84
84464-8680	3065338	17.75	3946414	18.97	3337040	23.4	1626225	26.84
84464-8681	3098145	17.75	3968230	18.98	3395430	23.4	1709623	26.84
84464-8682	3081295	17.76	3981186	18.98	3381220	23.4	1676831	26.85
84464-8683	3406927	17.76	4424979	18.98	3780089	23.4	1913847	26.84

IS1(PFB)=Pentafluorobenzene
IS2(DFB)=1,4-Difluorobenzene
IS3(CLB)=Chlorobenzene-d5
IS4(DCB)=1,4-Dichlorobenzene-d4

COMMERCIAL TE: , AND ENGINEERING

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): 10CC02A
Date Analyzed: 10/2/98
Instrument ID: H

SAMPLE ID	IS1 (PFB) AREA #	RT Time	IS2(DFB)AREA#	RT Time	IS3(CLB)AREA#	RT Time	IS4(DCB)AREA#	RT Time
CCAL	1948279	20.49	3017825	21.99	2791902	27.58	1617460	32.14
Method Blank	2100351	20.47	3172098	21.97	2629777	27.58	966847	32.14
84492-8739	776146	20.45	1195655	21.97	1016839	27.56	433302	32.12
84492-8740	730908	20.45	1124199	21.97	968358	27.56	401860	32.12

IS1(PFB) = Pentafluorobenzene
IS2(DFB) = 1,4-Difluorobenzene
IS3(CLB) = Chlorobenzene-d5
IS4(DCB) = 1,4-Dichlorobenzene-d4

COMMERCIAL TE[illegible] AND ENGINEERING

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): 10CC05A
Date Analyzed: 10/5/98
Instrument ID: L

SAMPLE ID	IS1 (PFB) AREA #	RT Time	IS2(DFB)AREA#	RT Time	IS3(CLB)AREA#	RT Time	IS4(DCB)AREA#	RT Time
CCAL	3597626	17.79	4556400	19.01	4247358	23.43	2424503	26.88
Method Blank	3473181	17.79	4412887	19.01	3912996	23.43	1856317	26.9
84492-8741	3752765	17.79	4756281	19.01	4191987	23.43	1981355	26.88
84492-8742	3595858	17.79	4590931	19.01	4122972	23.43	2013908	26.88
84492-8743	3477021	17.79	4396171	19.01	4067381	23.43	1924800	26.88
84492-8744	3783721	17.79	4832963	19.01	4688753	23.43	2662350	26.88
84492-8745	3970061	17.79	5068211	19.01	4739437	23.43	2666387	26.86
84492-8746	2798863	17.79	3629729	19.01	3395145	23.43	1640570	26.88
84492-8747	2695605	17.79	3437772	19.01	3115164	23.43	1482015	26.88

IS1(PFB) = Pentafluorobenzene
IS2(DFB) = 1,4-Difluorobenzene
IS3(CLB) = Chlorobenzene-d5
IS4(DCB) = 1,4-Dichlorobenzene-d4

RAW DATA

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L01OCT98\464-8677.D
Acq On : 1 Oct 98 5:19 pm
Sample : 84464-8677
Misc :
Quant Time: Oct 1 17:53 1998

Vial: 14
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

10/2/98

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	17.76	168	3462043	50.00 ppb	0.05
30) 1,4-Difluorobenzene	18.98	114	4429720	50.00 ppb	0.05
48) Chlorobenzene-d5	23.40	117	3801664	50.00 ppb	0.05
61) 1,4-dichlorobenzene-d4	26.84	152	1907489	50.00 ppb	0.05
System Monitoring Compounds					%Recovery
2) Dibromofluoromethane	17.77	113	2275940	54.22 ppb	108.44%
31) Toluene-d8	21.19	98	4548356	51.36 ppb	102.72%
60) 4-bromofluorobenzene	25.11	95	2265474	49.65 ppb	99.30%
Target Compounds					Qvalue
4) chloromethane	8.14	50	7243	0.36 ppb	87
6) bromomethane	10.17	94	1404	0.25 ppb #	20
11) methylene chloride	14.40	84	7531	0.38 ppb	90
14) Acetone	13.37	43	14169	1.75 ppb	94
16) Acrolein	17.10	55	7802	0.33 ppb	100
7) Acrylonitrile	15.10	52	3482	0.48 ppb	100
20) Vinylacetate	14.09	43	30091	4.37 ppb	100
25) 2-Butanone (MEK)	17.01	72	2425	0.65 ppb #	100
26) Tetrahydrofuran	17.44	72	1378	0.45 ppb #	1
32) 4-Methyl-2-pentanone (MIBK	21.01	43	11317	0.38 ppb #	72
43) toluene	21.29	92	21361	0.36 ppb	95
58) 2-Hexanone (MBK)	22.21	43	9946	0.39 ppb #	78
64) 1,1,2,2-tetrachloroethane	25.27	83	8865	0.26 ppb #	1
65) 1,2,3-trichloropropane	25.41	75	10516	0.34 ppb #	1
79) 1,2,4-trichlorobenzene	29.94	180	10564	0.25 ppb #	100
80) hexachlorobutadiene	30.06	225	8533	0.33 ppb	100
81) naphthalene	30.42	128	27522	0.33 ppb	100
82) 1,2,3-trichlorobenzene	30.84	180	13424	0.34 ppb	99
84) 2-methylnapthalene	32.52	142	27681	0.53 ppb	91

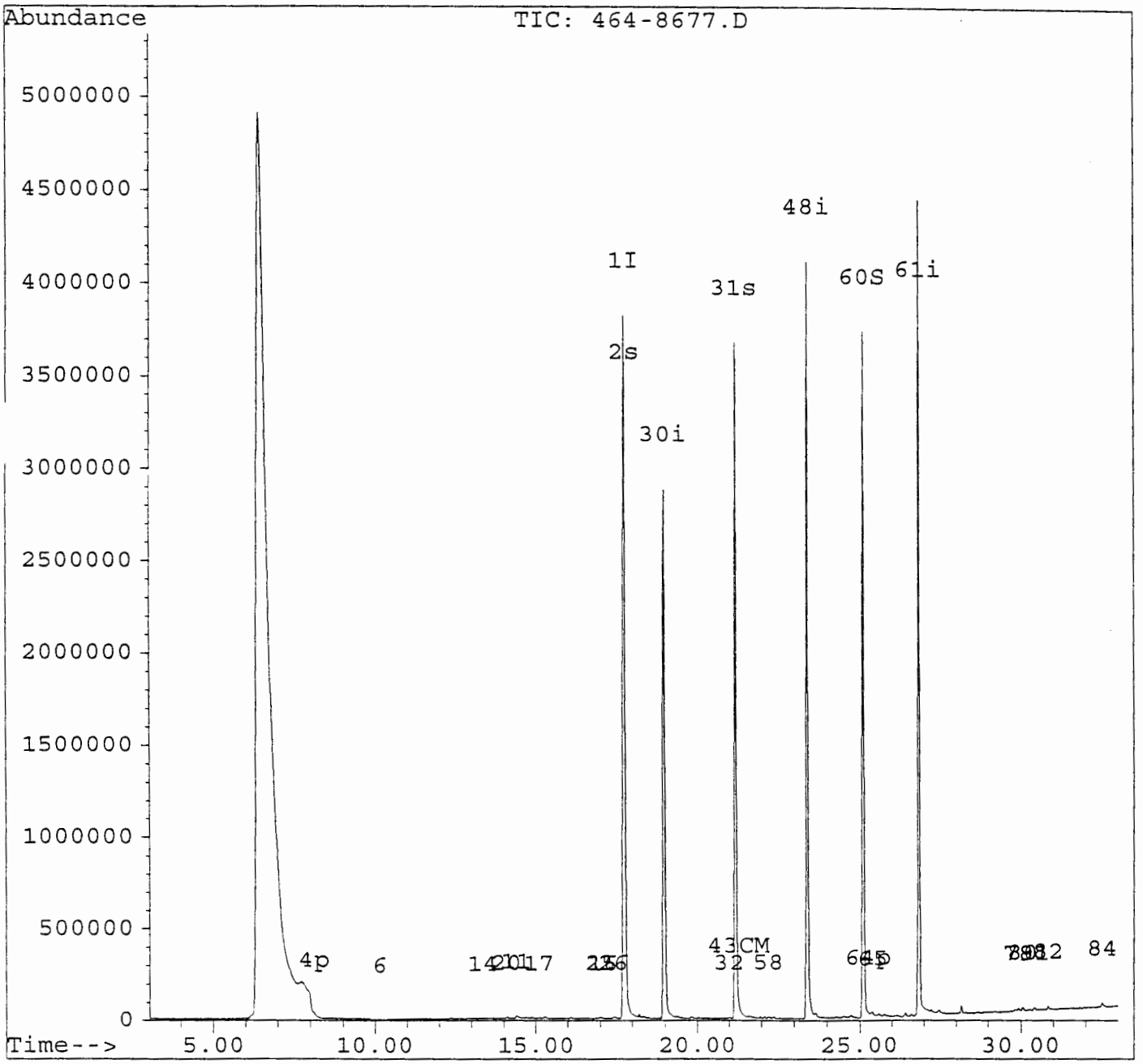
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L01OCT98\464-8677.D
Acq On : 1 Oct 98 5:19 pm
Sample : 84464-8677
Misc :
Quant Time: Oct 1 17:53 1998

Vial: 14
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L01OCT98\464-8678.D
Acq On : 1 Oct 98 6:00 pm
Sample : 84464-8678
Misc :
Quant Time: Oct 1 18:33 1998

Vial: 15
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

PS 10/2/98

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	17.75	168	3752808	50.00 ppb		0.05
30) 1,4-Difluorobenzene	18.97	114	4743304	50.00 ppb		0.05
48) Chlorobenzene-d5	23.40	117	4133016	50.00 ppb		0.05
61) 1,4-dichlorobenzene-d4	26.84	152	2082959	50.00 ppb		0.05
System Monitoring Compounds						%Recovery
2) Dibromofluoromethane	17.77	113	2393031	52.59 ppb		105.19%
31) Toluene-d8	21.20	98	4905728	51.73 ppb		103.47%
60) 4-bromofluorobenzene	25.11	95	2461037	49.61 ppb		99.22%
Target Compounds						Qvalue
4) chloromethane	8.13	50	11362	0.53 ppb		77
11) methylene chloride	14.38	84	9621	0.45 ppb	#	88
13) Ethylether	12.36	74	2587	0.45 ppb		100
14) Acetone	13.37	43	27662	3.15 ppb	#	89
15) Carbondisulfide	13.58	76	19762	0.47 ppb		100
16) Acrolein	17.10	55	23352	0.91 ppb		100
17) Acrylonitrile	15.10	52	13004	1.64 ppb		100
19) Methyl-tert-butyl Ether (M	14.87	73	24882	0.53 ppb	#	100
~~20) Vinylacetate~~	~~14.11~~	~~43~~	~~42852~~	~~5.74 ppb~~		~~100~~
25) 2-Butanone (MEK)	17.01	72	6925	1.71 ppb	#	100
26) Tetrahydrofuran	17.45	72	4667	1.40 ppb	#	1
29) Allyl chloride	13.58	76	19762	0.47 ppb	#	99
32) 4-Methyl-2-pentanone (MIBK	21.01	43	43802	1.39 ppb	#	72
37) 1,2-dichloroethane	18.51	62	10127	0.24 ppb		91
38) trichloroethene	19.38	95	10900	0.28 ppb		81
40) dibromomethane	20.02	93	7472	0.29 ppb		96
43) toluene	21.29	92	25678	0.40 ppb		97
45) 1,1,2-trichloroethane	21.96	83	8786	0.35 ppb	#	72
46) 1,2-Dibromoethane	22.79	107	13309	0.38 ppb	#	98
50) 1,3-dichloropropane	22.23	76	16959	0.39 ppb		90
55) para & meta xylene	23.64	106	11977	0.29 ppb		98
58) 2-Hexanone (MBK)	22.21	43	34029	1.24 ppb	#	76
59) bromoform	24.70	173	7539	0.29 ppb		96
64) 1,1,2,2-tetrachloroethane	25.27	83	23131	0.62 ppb	#	1
65) 1,2,3-trichloropropane	25.41	75	33250	0.98 ppb	#	1
75) 1,4-dichlorobenzene	26.88	146	12677	0.21 ppb	#	1
79) 1,2,4-trichlorobenzene	29.94	180	13333	0.28 ppb	#	100
80) hexachlorobutadiene	30.06	225	16407	0.57 ppb		99
81) naphthalene	30.42	128	51219	0.57 ppb		100
82) 1,2,3-trichlorobenzene	30.84	180	17101	0.40 ppb		96
84) 2-methylnapthalene	32.52	142	36288	0.64 ppb		91

NC 10/16

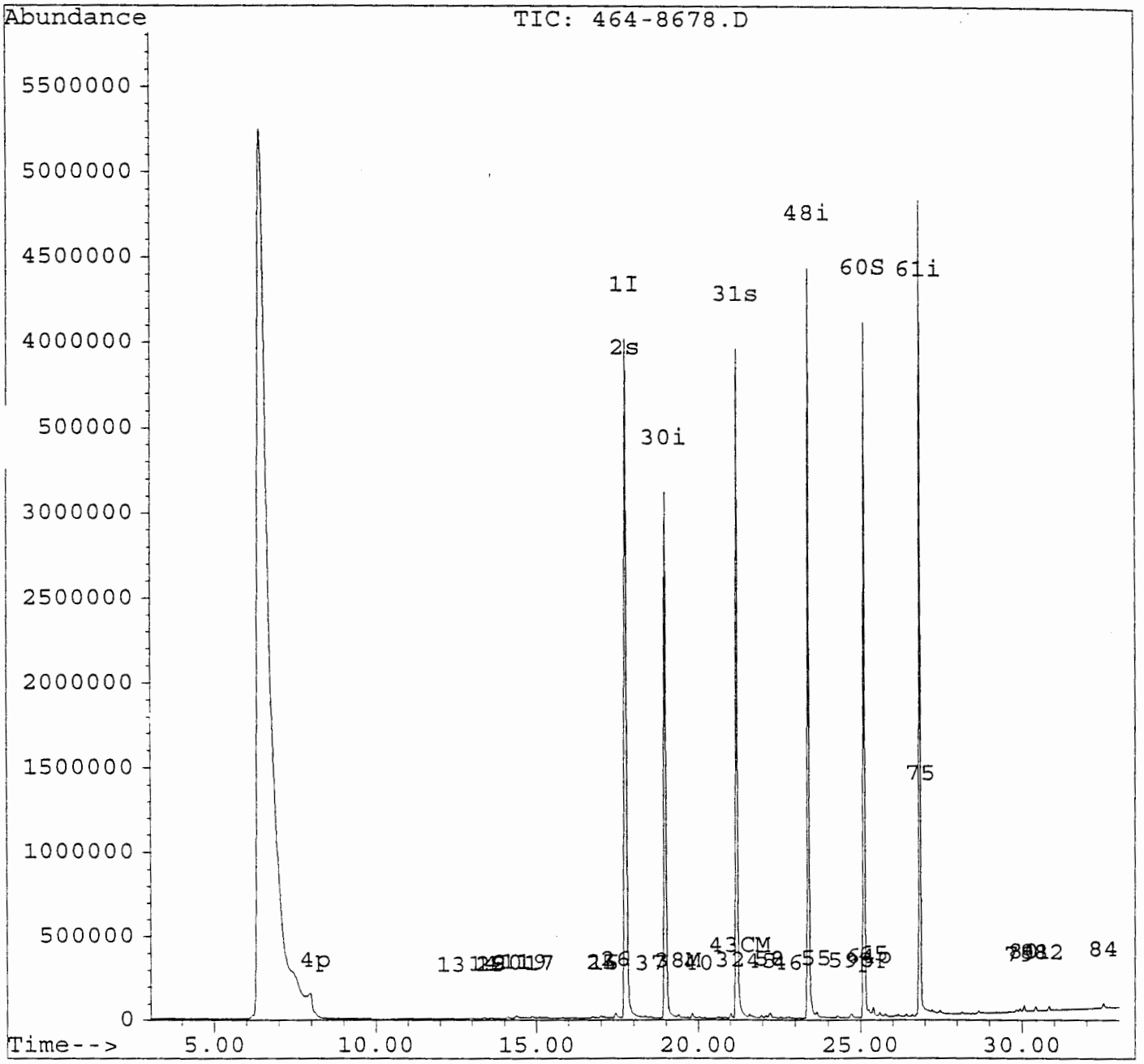
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L01OCT98\464-8678.D
Acq On : 1 Oct 98 6:00 pm
Sample : 84464-8678
Misc :
Quant Time: Oct 1 18:33 1998

Vial: 15
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L01OCT98\464-8679.D
Acq On : 1 Oct 98 6:40 pm
Sample : 84464-8679
Misc :
Quant Time: Oct 1 19:14 1998

Vial: 16
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

PW 10/2/98

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	17.75	168	3517058	50.00 ppb		0.05
30) 1,4-Difluorobenzene	18.97	114	4592373	50.00 ppb		0.05
48) Chlorobenzene-d5	23.40	117	3892654	50.00 ppb		0.05
61) 1,4-dichlorobenzene-d4	26.84	152	1984017	50.00 ppb		0.05
System Monitoring Compounds						%Recovery
2) Dibromofluoromethane	17.77	113	2328630	54.61 ppb		109.22%
31) Toluene-d8	21.20	98	4653273	50.68 ppb		101.37%
60) 4-bromofluorobenzene	25.09	95	2313641	49.52 ppb		99.04%
Target Compounds						Qvalue
4) chloromethane	8.12	50	11257	0.56 ppb		92
11) methylene chloride	14.39	84	8858	0.44 ppb	#	88
13) Ethylether	12.36	74	1730	0.32 ppb		100
14) Acetone	13.39	43	25202	3.06 ppb		93
15) Carbondisulfide	13.60	76	12323	0.31 ppb		96
6) Acrolein	17.10	55	17564	0.73 ppb		100
7) Acrylonitrile	15.10	52	11162	1.50 ppb		100
19) Methyl-tert-butyl Ether (M	14.87	73	18258	0.41 ppb	#	100
~~20) Vinylacetate~~	~~14.09~~	~~43~~	~~50792~~	~~7.26 ppb~~		~~100~~ DNC
25) 2-Butanone (MEK)	17.01	72	5509	1.45 ppb	#	100
26) Tetrahydrofuran	17.45	72	3946	1.26 ppb	#	1
29) Allyl chloride	13.60	76	12323	0.32 ppb	#	97
32) 4-Methyl-2-pentanone (MIBK	21.01	43	36546	1.20 ppb	#	73
38) trichloroethene	19.38	95	9983	0.26 ppb		83
40) dibromomethane	20.02	93	7783	0.31 ppb		92
43) toluene	21.29	92	27852	0.45 ppb		99
45) 1,1,2-trichloroethane	21.96	83	7942	0.33 ppb	#	64
46) 1,2-Dibromoethane	22.79	107	13017	0.39 ppb	#	98
50) 1,3-dichloropropane	22.23	76	12998	0.32 ppb		98
55) para & meta xylene	23.64	106	13290	0.34 ppb		93
58) 2-Hexanone (MBK)	22.21	43	27406	1.06 ppb	#	77
59) bromoform	24.69	173	9630	0.39 ppb		99
64) 1,1,2,2-tetrachloroethane	25.27	83	23973	0.68 ppb	#	1
65) 1,2,3-trichloropropane	25.39	75	28115	0.87 ppb	#	1
75) 1,4-dichlorobenzene	26.88	146	14743	0.25 ppb	#	1
76) 1,2-dichlorobenzene	27.48	146	11279	0.21 ppb	#	100
77) n-butylbenzene	27.21	91	20263	0.21 ppb	#	100
79) 1,2,4-trichlorobenzene	29.92	180	15170	0.34 ppb	#	100
80) hexachlorobutadiene	30.04	225	13829	0.51 ppb		96
81) naphthalene	30.42	128	59218	0.69 ppb		100
82) 1,2,3-trichlorobenzene	30.82	180	18597	0.45 ppb		95
4) 2-methylnapthalene	32.50	142	45865	0.85 ppb		99

10/14

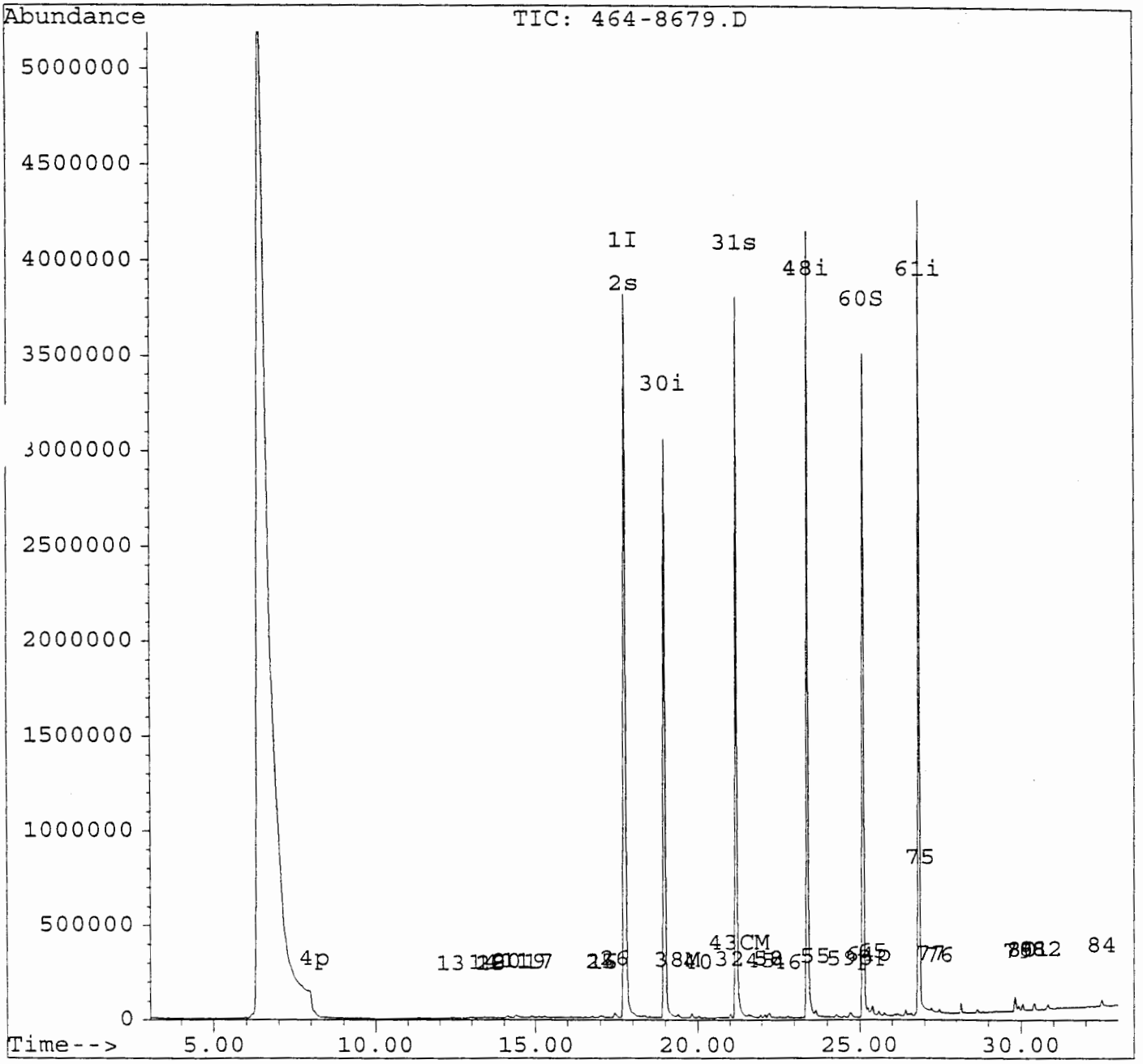
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L01OCT98\464-8679.D
Acq On : 1 Oct 98 6:40 pm
Sample : 84464-8679
Misc :
Quant Time: Oct 1 19:14 1998

Vial: 16
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\464-8680.D
Acq On : 2 Oct 98 12:14 pm
Sample : 84464-8680
Misc :
Quant Time: Oct 2 12:48 1998

Vial: 5
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

10/4/98

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	17.75	168	3065338	50.00 ppb	0.05
30) 1,4-Difluorobenzene	18.97	114	3946414	50.00 ppb	0.05
48) Chlorobenzene-d5	23.40	117	3337040	50.00 ppb	0.05
61) 1,4-dichlorobenzene-d4	26.84	152	1626225	50.00 ppb	0.05
System Monitoring Compounds					**%Recovery**
2) Dibromofluoromethane	17.77	113	2003640	53.91 ppb	107.83%
31) Toluene-d8	21.18	98	4053657	51.38 ppb	102.76%
60) 4-bromofluorobenzene	25.11	95	1988021	49.64 ppb	99.27%
Target Compounds					**Qvalue**
3) dichlorodifluoromethane	7.27	85	10951	0.26 ppb	95
4) chloromethane	8.10	50	12030	0.68 ppb	90
11) methylene chloride	14.39	84	13524	0.78 ppb	87
14) Acetone	13.39	43	11326	1.58 ppb	93
20) Vinylacetate	14.11	43	3219	0.53 ppb	100
25) 2-Butanone (MEK)	17.01	72	1251	0.38 ppb #	100
43) toluene	21.29	92	20529	0.39 ppb	97
55) para & meta xylene	23.64	106	10151	0.30 ppb	94
73) 1,3-dichlorobenzene	26.75	146	9130	0.20 ppb	95
75) 1,4-dichlorobenzene	26.88	146	11241	0.23 ppb #	1
79) 1,2,4-trichlorobenzene	29.94	180	8715	0.24 ppb #	100
81) naphthalene	30.42	128	14056	0.20 ppb	100
82) 1,2,3-trichlorobenzene	30.84	180	7903	0.23 ppb	97
84) 2-methylnapthalene	32.52	142	15144	0.34 ppb	93

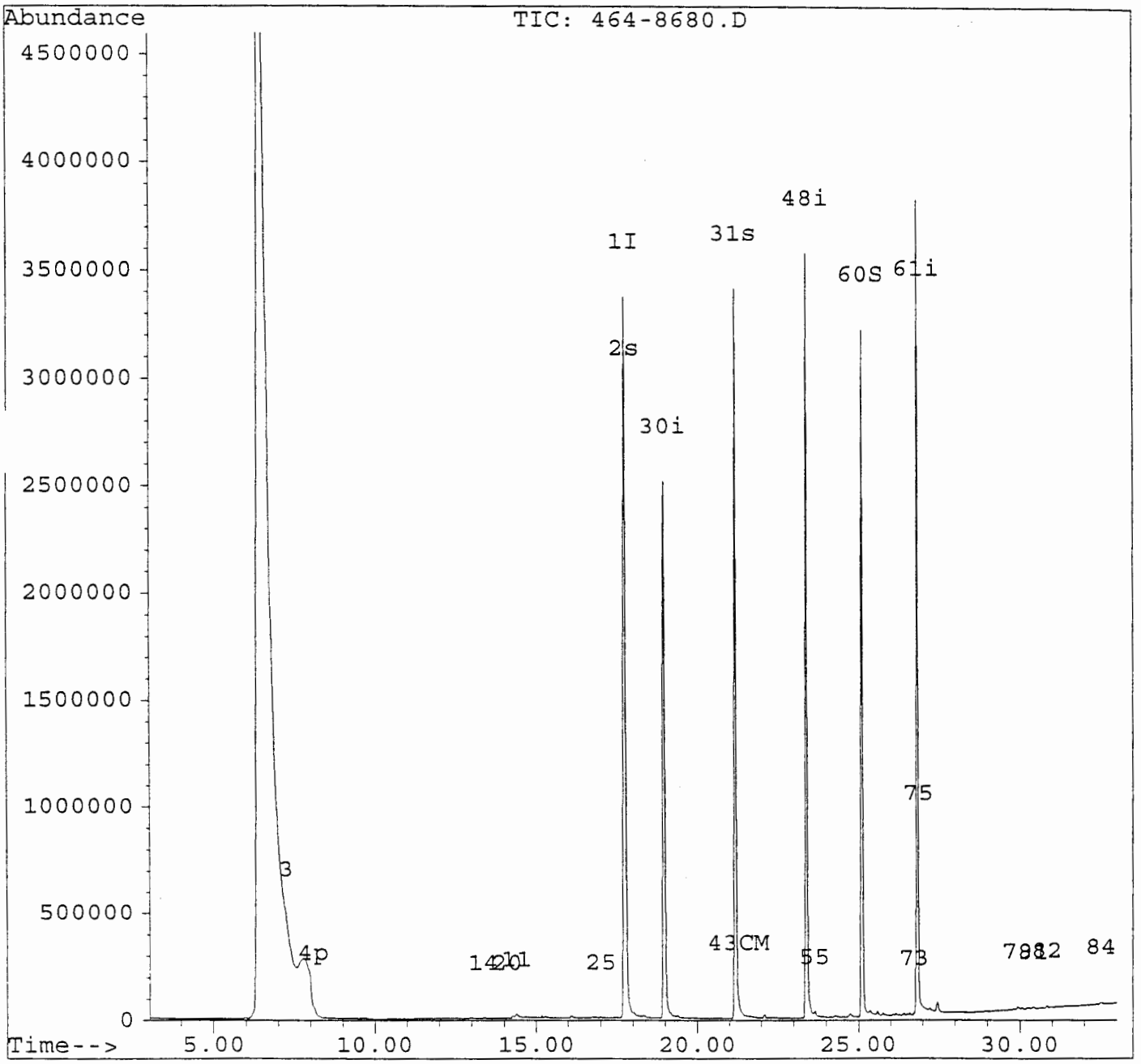
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\464-8680.D
Acq On : 2 Oct 98 12:14 pm
Sample : 84464-8680
Misc :
Quant Time: Oct 2 12:48 1998

Vial: 5
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\464-8681.D
Acq On : 2 Oct 98 12:55 pm
Sample : 84464-8681
Misc :
Quant Time: Oct 2 13:29 1998

Vial: 6
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

10/15/98

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	17.75	168	3098145	50.00 ppb		0.05
30) 1,4-Difluorobenzene	18.98	114	3968230	50.00 ppb		0.05
48) Chlorobenzene-d5	23.40	117	3395430	50.00 ppb		0.05
61) 1,4-dichlorobenzene-d4	26.84	152	1709623	50.00 ppb		0.05
System Monitoring Compounds						%Recovery
2) Dibromofluoromethane	17.77	113	2110941	56.20 ppb		112.40%
31) Toluene-d8	21.19	98	4125928	52.01 ppb		104.02%
60) 4-bromofluorobenzene	25.11	95	2051262	50.33 ppb		100.67%
Target Compounds						Qvalue
4) chloromethane	8.15	50	12068	0.68 ppb		91
11) methylene chloride	14.40	84	12342	0.70 ppb		88
14) Acetone	13.39	43	10141	1.40 ppb	#	87
20) Vinylacetate	14.11	43	6321	1.03 ppb		100
25) 2-Butanone (MEK)	17.01	72	807	0.24 ppb	#	100
3) toluene	21.29	92	17642	0.33 ppb		100
27) 1,4-dichloro-2-butene	25.34	53	1267	0.39 ppb	#	1
84) 2-methylnapthalene	32.52	142	10850	0.23 ppb		95

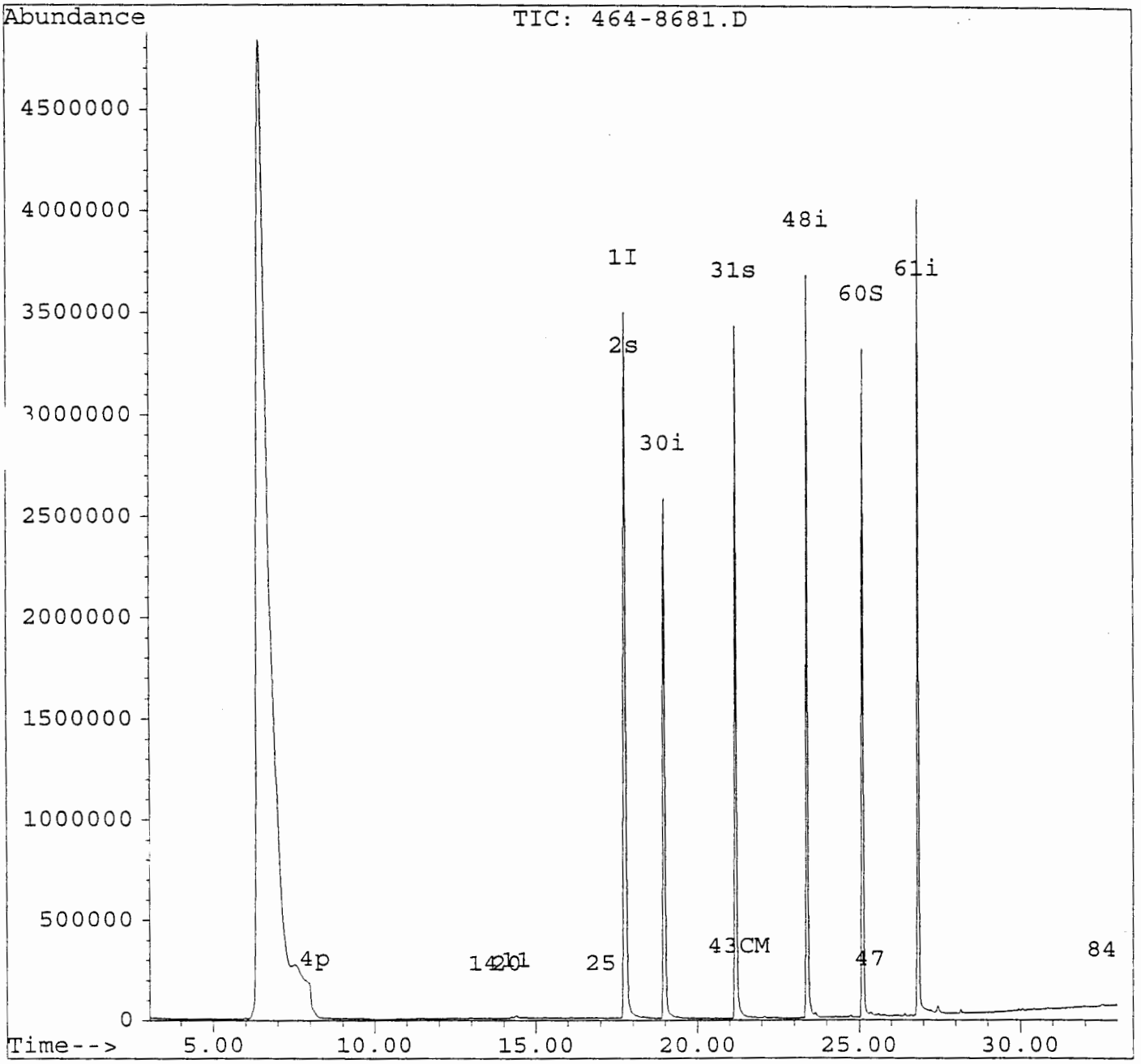
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\464-8681.D
Acq On : 2 Oct 98 12:55 pm
Sample : 84464-8681
Misc :
Quant Time: Oct 2 13:29 1998

Vial: 6
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\464-8682.D
Acq On : 2 Oct 98 1:36 pm
Sample : 84464-8682
Misc :
Quant Time: Oct 2 14:10 1998

Vial: 7
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

10/5/98

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	17.76	168	3081295	50.00 ppb	0.06
30) 1,4-Difluorobenzene	18.98	114	3981186	50.00 ppb	0.06
48) Chlorobenzene-d5	23.40	117	3381220	50.00 ppb	0.06
61) 1,4-dichlorobenzene-d4	26.85	152	1676831	50.00 ppb	0.06
System Monitoring Compounds					%Recovery
2) Dibromofluoromethane	17.77	113	2071155	55.44 ppb	110.88%
31) Toluene-d8	21.19	98	4100967	51.53 ppb	103.05%
60) 4-bromofluorobenzene	25.11	95	2045816	50.41 ppb	100.82%
Target Compounds					Qvalue
3) dichlorodifluoromethane	7.27	85	9220	0.21 ppb	89
4) chloromethane	8.10	50	12444	0.70 ppb	96
11) methylene chloride	14.38	84	13385	0.76 ppb #	83
14) Acetone	13.37	43	12124	1.68 ppb #	90
20) Vinylacetate	14.10	43	9709	1.58 ppb	100
5) 2-Butanone (MEK)	17.00	72	989	0.30 ppb #	100
43) toluene	21.29	92	14735	0.28 ppb	98
47) 1,4-dichloro-2-butene	25.33	53	741	0.23 ppb #	1

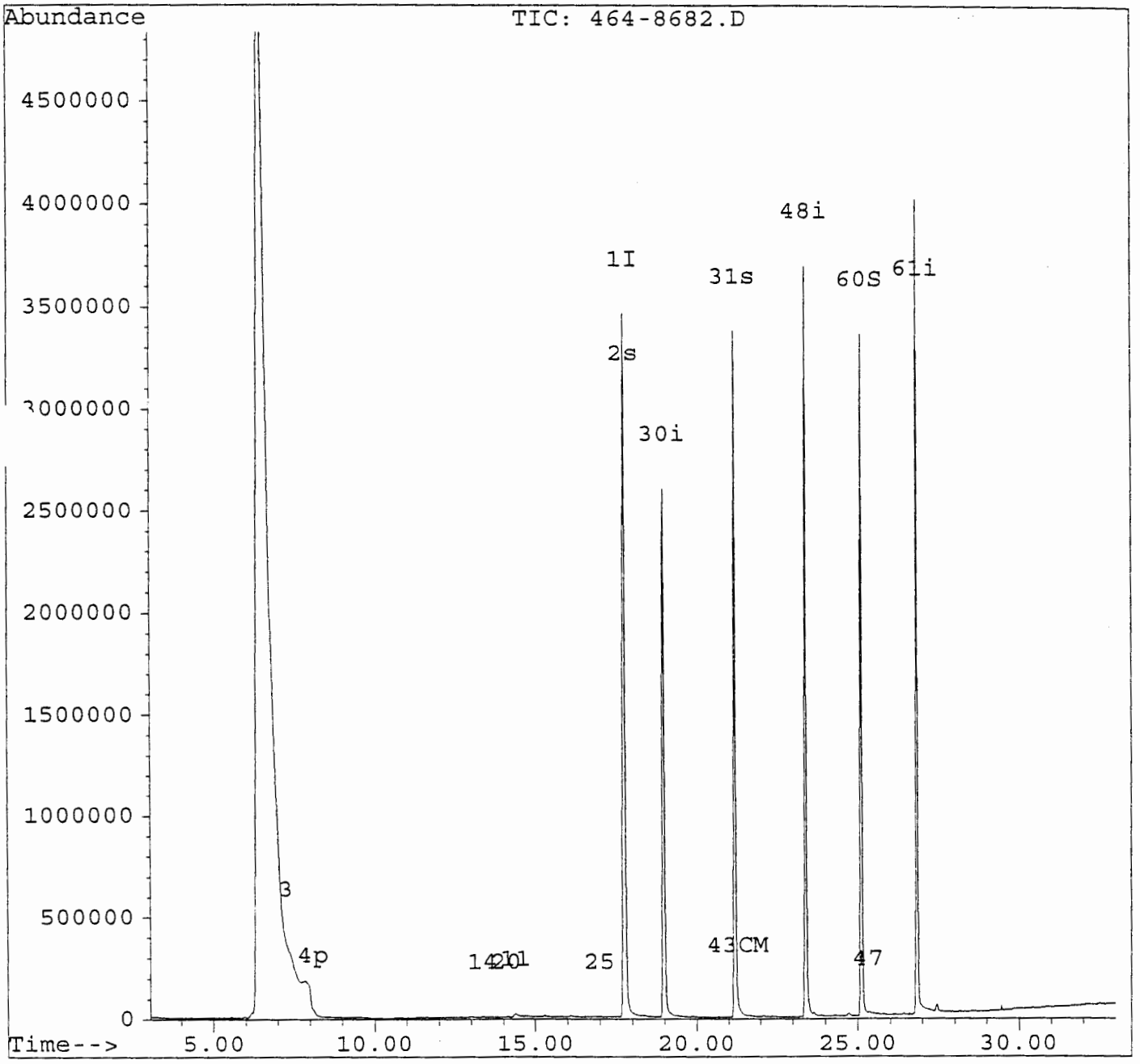
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\464-8682.D
Acq On : 2 Oct 98 1:36 pm
Sample : 84464-8682
Misc :
Quant Time: Oct 2 14:10 1998

Vial: 7
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\464-8683.D
Acq On : 2 Oct 98 2:16 pm
Sample : 84464-8683
Misc :
Quant Time: Oct 2 14:50 1998

Vial: 8
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

10/5/98

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	17.76	168	3406927	50.00 ppb	0.05
30) 1,4-Difluorobenzene	18.98	114	4424979	50.00 ppb	0.05
48) Chlorobenzene-d5	23.40	117	3780089	50.00 ppb	0.05
61) 1,4-dichlorobenzene-d4	26.84	152	1913847	50.00 ppb	0.05
System Monitoring Compounds					%Recovery
2) Dibromofluoromethane	17.77	113	2329366	56.39 ppb	112.79%
31) Toluene-d8	21.20	98	4552664	51.47 ppb	102.93%
60) 4-bromofluorobenzene	25.11	95	2294280	50.57 ppb	101.14%
Target Compounds					Qvalue
4) chloromethane	8.12	50	11258	0.58 ppb	86
11) methylene chloride	14.38	84	12593	0.65 ppb	95
14) Acetone	13.37	43	14819	1.86 ppb #	88
20) Vinylacetate	14.10	43	10010	1.48 ppb	100
25) 2-Butanone (MEK)	17.01	72	866	0.24 ppb #	100
3) toluene	21.31	92	17978	0.30 ppb	97

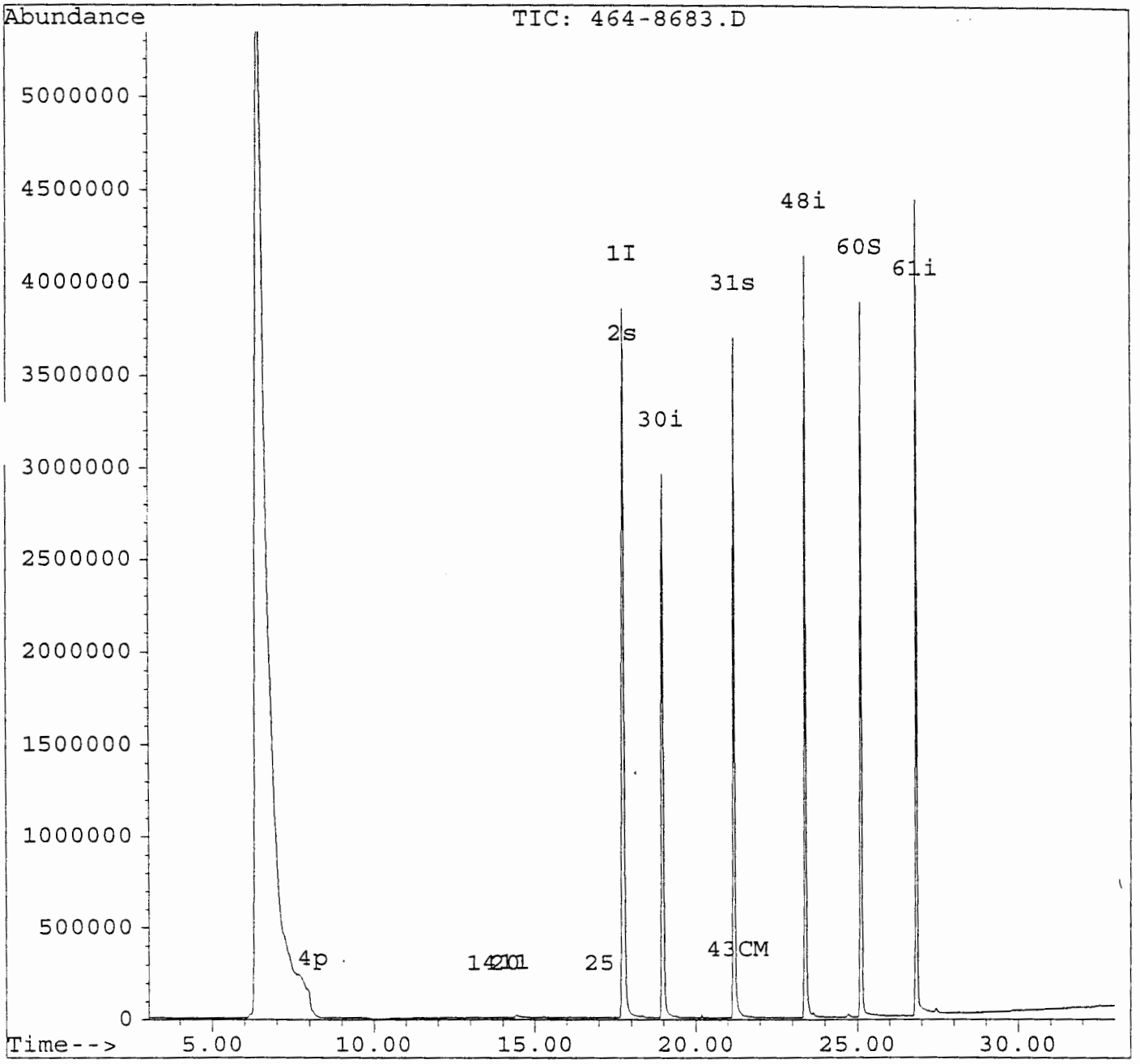
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\464-8683.D
Acq On : 2 Oct 98 2:16 pm
Sample : 84464-8683
Misc :
Quant Time: Oct 2 14:50 1998

Vial: 8
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\492-8739.D
Acq On : 3 Oct 98 12:23 am
Sample : 84492-8739
Misc :
Quant Time: Oct 3 1:01 1998

Vial: 12
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration

PJ 10/5/98

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	20.45	168	776146	50.00 ppb	-0.05
30) 1,4-Difluorobenzene	21.97	114	1195655	50.00 ppb	-0.03
48) Chlorobenzene-d5	27.56	117	1016839	50.00 ppb	-0.05
61) 1,4-dichlorobenzene-d4	32.12	152	433302	50.00 ppb	-0.02
System Monitoring Compounds					%Recovery
2) Dibromofluoromethane	20.51	113	491393	52.98 ppb	105.96%
31) Toluene-d8	24.79	98	1159653	45.34 ppb	90.67%
60) 4-bromofluorobenzene	29.80	95	475290	45.54 ppb	91.08%
Target Compounds					Qvalue
10) 1,1-dichloroethene	15.53	96	2198	0.33 ppb #	69
11) methylene chloride	16.77	84	7426	0.62 ppb #	12
13) Ethylether	14.86	74	1205	0.27 ppb	100
14) Acetone	15.66	43	13882	3.91 ppb	96
16) Acrolein	19.76	55	1866	0.30 ppb	100
7) Acrylonitrile	17.33	52	1100	0.52 ppb	100
9) Methyl-tert-butyl Ether (M	17.44	73	3966	0.23 ppb #	90
25) 2-Butanone (MEK)	19.57	72	214	0.25 ppb	92
32) 4-Methyl-2-pentanone (MIBK	24.42	43	6011	0.85 ppb #	71
36) benzene	21.38	78	7287	0.24 ppb	93
37) 1,2-dichloroethane	21.36	62	2083	0.24 ppb	80
38) trichloroethene	22.54	95	1967	0.23 ppb #	76
43) toluene	24.92	92	9511	0.56 ppb #	82
49) tetrachloroethene	26.01	166	2314	0.20 ppb	86
52) chlorobenzene	27.62	112	4391	0.25 ppb	88
54) ethylbenzene	27.74	91	6303	0.21 ppb	94
55) para & meta xylene	27.95	106	4528	0.40 ppb #	61
58) 2-Hexanone (MBK)	25.98	43	2341	0.39 ppb #	82
64) 1,1,2,2-tetrachloroethane	29.94	83	1457	0.21 ppb #	84
65) 1,2,3-trichloropropane	30.10	75	5317	0.74 ppb	99
67) 2-chlorotoluene	30.51	91	4424	0.21 ppb	99
68) 4-chlorotoluene	30.73	91	3678	0.21 ppb	96

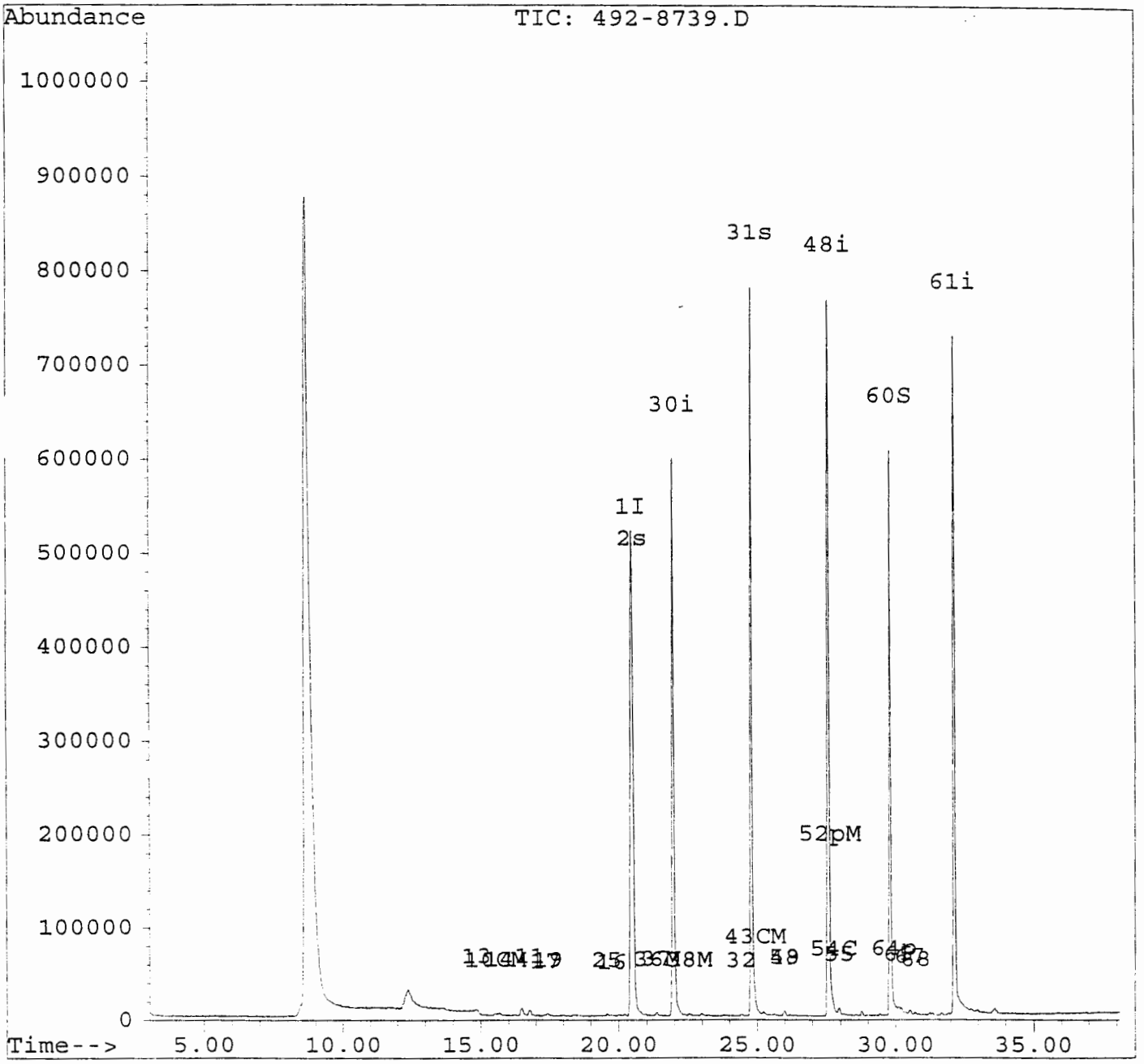
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\492-8739.D
Acq On : 3 Oct 98 12:23 am
Sample : 84492-8739
Misc :
Quant Time: Oct 3 1:01 1998

Vial: 12
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\492-8740.D
Acq On : 3 Oct 98 1:10 am
Sample : 84492-8740
Misc :
Quant Time: Oct 3 1:48 1998

Vial: 13
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration

10/5/98

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	20.45	168	730908	50.00 ppb	-0.04
30) 1,4-Difluorobenzene	21.97	114	1124199	50.00 ppb	-0.03
48) Chlorobenzene-d5	27.56	117	968358	50.00 ppb	-0.04
61) 1,4-dichlorobenzene-d4	32.12	152	401860	50.00 ppb	-0.01
System Monitoring Compounds					**%Recovery**
2) Dibromofluoromethane	20.52	113	475203	54.40 ppb	108.81%
31) Toluene-d8	24.79	98	1105214	45.95 ppb	91.91%
60) 4-bromofluorobenzene	29.79	95	456794	45.96 ppb	91.92%
Target Compounds					**Qvalue**
11) methylene chloride	16.76	84	6297	0.56 ppb #	1
14) Acetone	15.67	43	7067	2.12 ppb	98
28) 1,1,1-trichloroethane	20.64	97	2755	0.28 ppb #	35
43) toluene	24.91	92	6297	0.39 ppb #	73
49) tetrachloroethene	26.00	166	4161	0.38 ppb	87

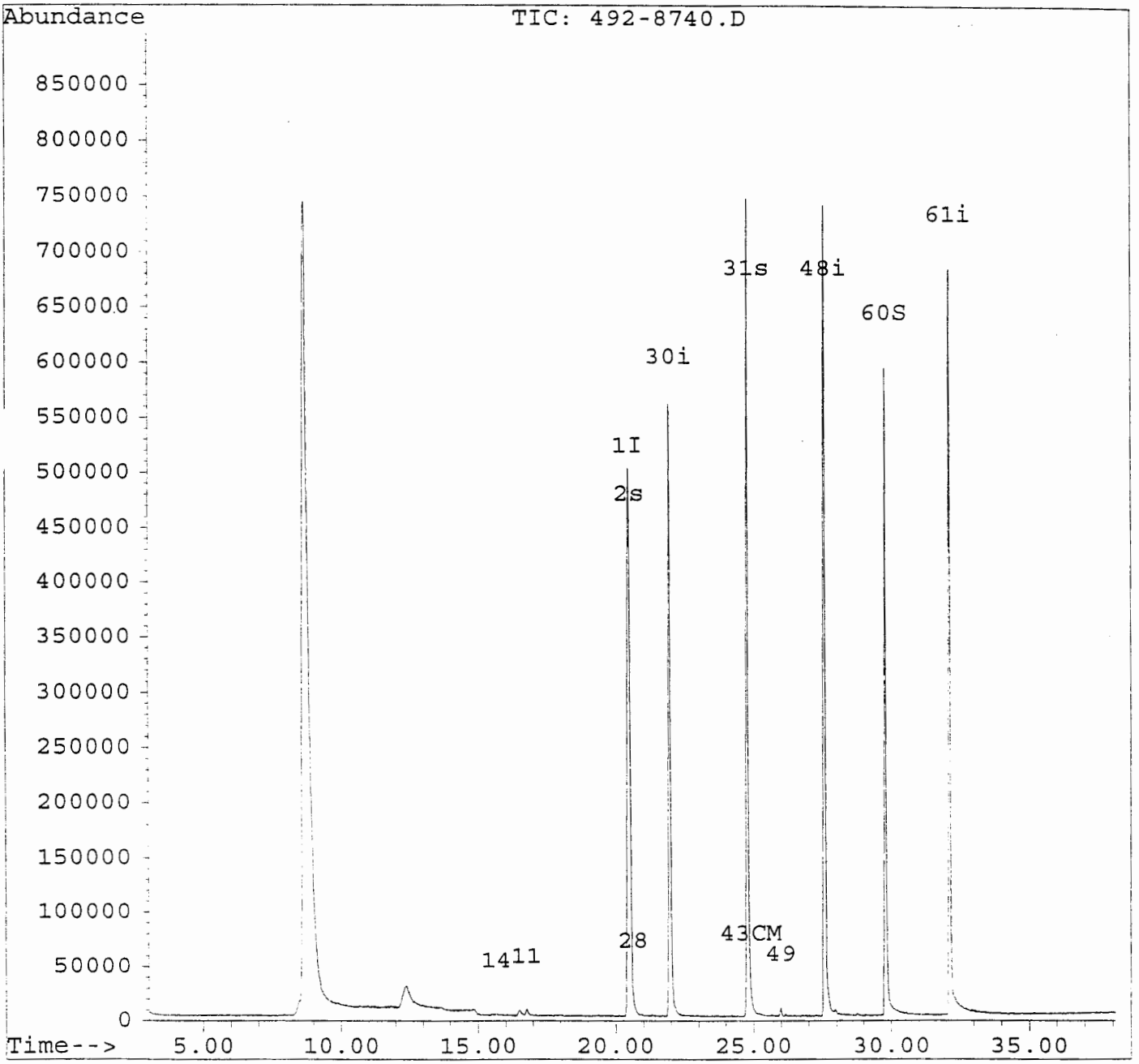
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\492-8740.D
Acq On : 3 Oct 98 1:10 am
Sample : 84492-8740
Misc :
Quant Time: Oct 3 1:48 1998

Vial: 13
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\492-8741.D
Acq On : 5 Oct 98 7:15 pm
Sample : 84492-8741 rr
Misc :
Quant Time: Oct 5 19:49 1998

Vial: 8
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration

PR 10/5/98

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	17.79	168	3752765	50.00 ppb	0.09
30) 1,4-Difluorobenzene	19.01	114	4756281	50.00 ppb	0.09
48) Chlorobenzene-d5	23.43	117	4191987	50.00 ppb	0.09
61) 1,4-dichlorobenzene-d4	26.88	152	1981355	50.00 ppb	0.09
System Monitoring Compounds					**%Recovery**
2) Dibromofluoromethane	17.81	113	2430449	53.42 ppb	106.84%
31) Toluene-d8	21.24	98	4795815	50.44 ppb	100.87%
60) 4-bromofluorobenzene	25.15	95	2471283	49.12 ppb	98.23%
Target Compounds					**Qvalue**
4) chloromethane	8.17	50	6399	0.30 ppb	79
11) methylene chloride	14.43	84	10158	0.48 ppb	90
14) Acetone	13.42	43	13423	1.53 ppb	92
25) 2-Butanone (MEK)	17.07	72	941	0.23 ppb #	100
43) toluene	21.34	92	37869	0.59 ppb	94

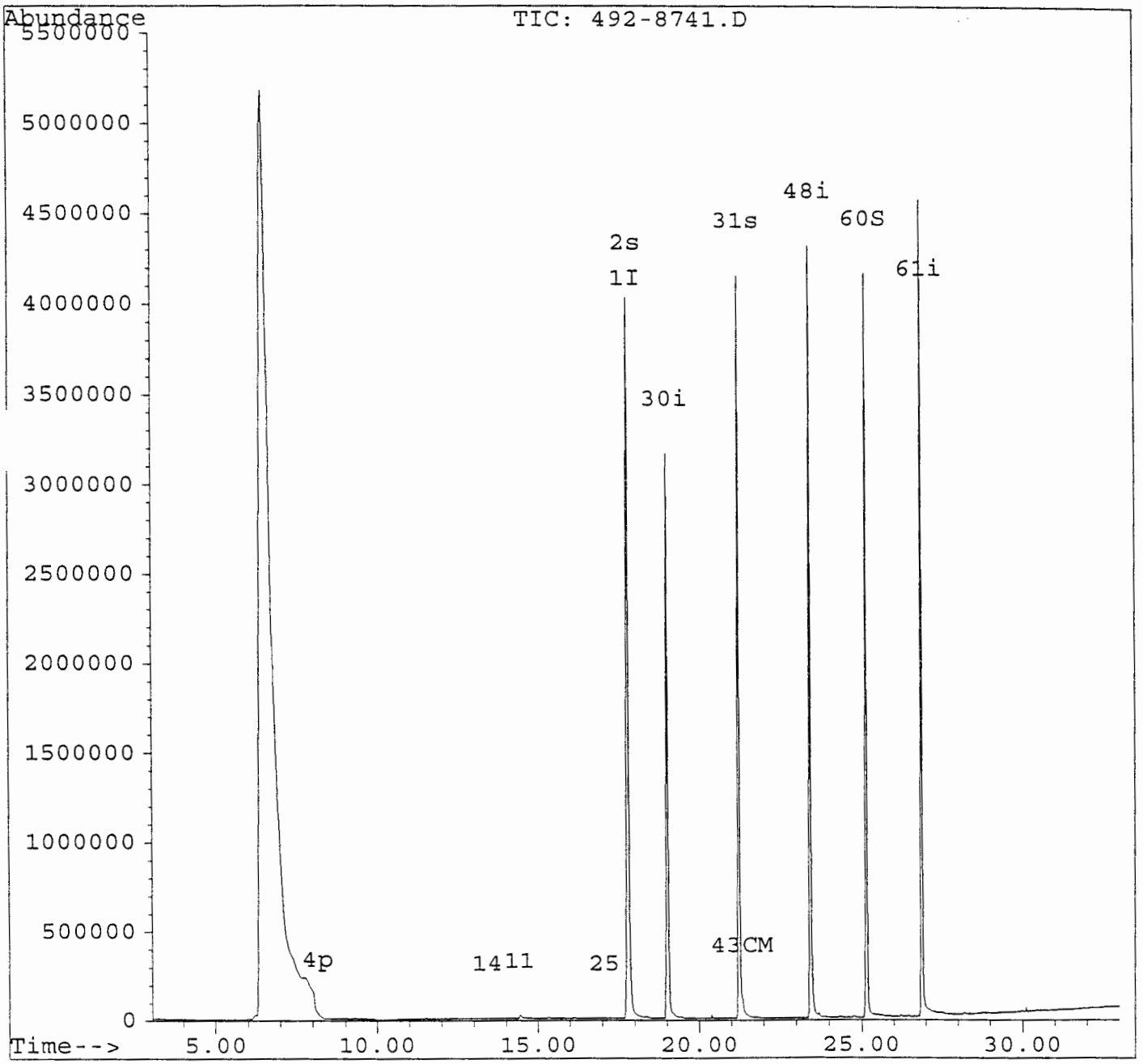
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\492-8741.D
Acq On : 5 Oct 98 7:15 pm
Sample : 84492-8741 rr
Misc :
Quant Time: Oct 5 19:49 1998

Vial: 8
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\492-8742.D
Acq On : 5 Oct 98 7:56 pm
Sample : 84492-8742 rr
Misc :
Quant Time: Oct 5 20:29 1998

Vial: 9
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration

10/5/98

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	17.79	168	3595858	50.00 ppb	0.09
30) 1,4-Difluorobenzene	19.01	114	4590931	50.00 ppb	0.09
48) Chlorobenzene-d5	23.43	117	4122972	50.00 ppb	0.09
61) 1,4-dichlorobenzene-d4	26.88	152	2013908	50.00 ppb	0.09
System Monitoring Compounds					%Recovery
2) Dibromofluoromethane	17.81	113	2422329	55.56 ppb	111.12%
31) Toluene-d8	21.24	98	4778160	52.06 ppb	104.12%
60) 4-bromofluorobenzene	25.15	95	2482547	50.17 ppb	100.33%
Target Compounds					Qvalue
4) chloromethane	8.17	50	8171	0.40 ppb	76
6) bromomethane	10.21	94	1222	0.21 ppb #	14
11) methylene chloride	14.43	84	9865	0.48 ppb #	87
14) Acetone	13.42	43	11650	1.39 ppb #	81
43) toluene	21.33	92	35909	0.58 ppb	95

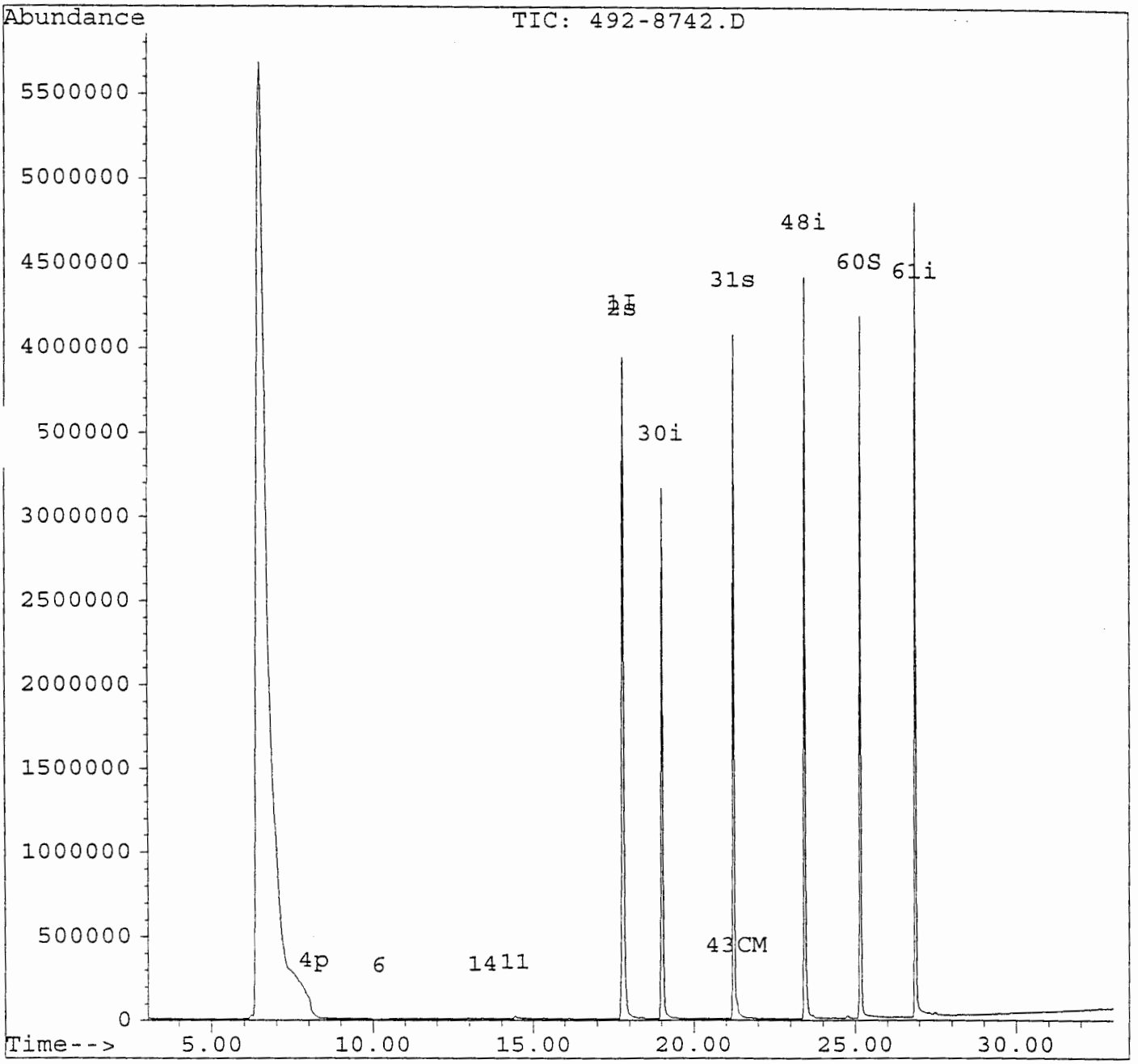
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\492-8742.D
Acq On : 5 Oct 98 7:56 pm
Sample : 84492-8742 rr
Misc :
Quant Time: Oct 5 20:29 1998

Vial: 9
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\492-8743.D
Acq On : 5 Oct 98 8:36 pm
Sample : 84492-8743 rr
Misc :
Quant Time: Oct 5 21:10 1998

Vial: 10
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration

PDC 10/5/98

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	17.79	168	3477021	50.00 ppb		0.09
30) 1,4-Difluorobenzene	19.01	114	4396171	50.00 ppb		0.09
48) Chlorobenzene-d5	23.43	117	4067381	50.00 ppb		0.09
61) 1,4-dichlorobenzene-d4	26.88	152	1924800	50.00 ppb		0.09
System Monitoring Compounds						%Recovery
2) Dibromofluoromethane	17.81	113	2342795	55.57 ppb		111.15%
31) Toluene-d8	21.24	98	4742873	53.97 ppb		107.93%
60) 4-bromofluorobenzene	25.15	95	2397822	49.12 ppb		98.23%
Target Compounds						Qvalue
4) chloromethane	8.19	50	10977	0.55 ppb		82
11) methylene chloride	14.43	84	9152	0.46 ppb	#	83
14) Acetone	13.42	43	15375	1.89 ppb		95
15) Carbondisulfide	13.63	76	8033	0.21 ppb	#	80
20) Vinylacetate	14.20	43	1689	0.24 ppb		100
9) Allyl chloride	13.63	76	8033	0.21 ppb	#	81
3) toluene	21.34	92	35677	0.60 ppb		93
47) 1,4-dichloro-2-butene	25.41	53	865	0.24 ppb	#	1

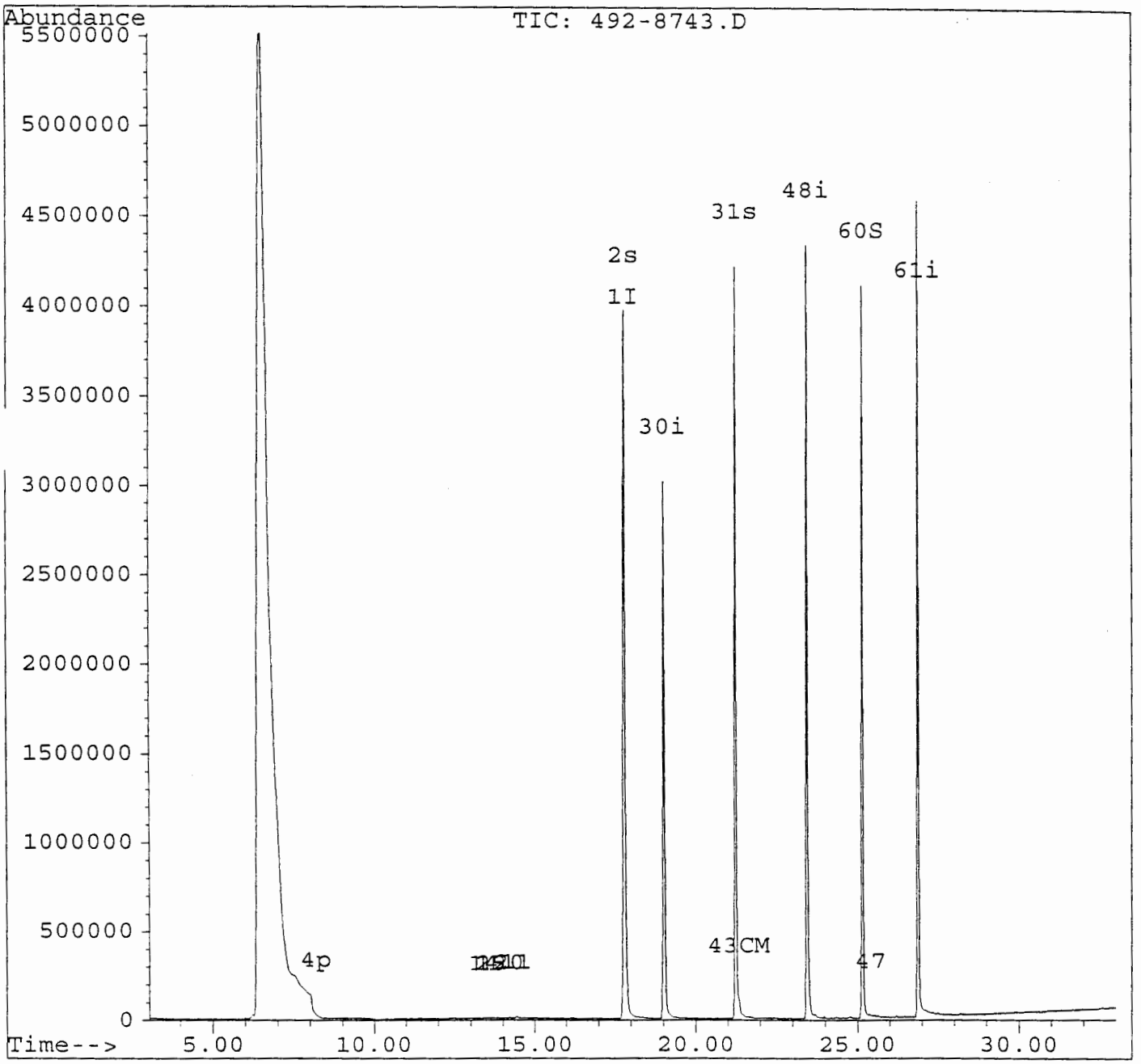
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\492-8743.D
Acq On : 5 Oct 98 8:36 pm
Sample : 84492-8743 rr
Misc :
Quant Time: Oct 5 21:10 1998

Vial: 10
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\492-8746.D
Acq On : 5 Oct 98 10:37 pm
Sample : 84492-8746 rr
Misc :
Quant Time: Oct 5 23:11 1998

Vial: 13
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration

PDV 10/5/98

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	17.79	168	2798863	50.00 ppb	0.09
30) 1,4-Difluorobenzene	19.01	114	3629729	50.00 ppb	0.09
48) Chlorobenzene-d5	23.43	117	3395145	50.00 ppb	0.09
61) 1,4-dichlorobenzene-d4	26.88	152	1640570	50.00 ppb	0.09
System Monitoring Compounds					%Recovery
2) Dibromofluoromethane	17.81	113	1950718	57.49 ppb	114.97%
31) Toluene-d8	21.24	98	3920310	54.03 ppb	108.05%
60) 4-bromofluorobenzene	25.15	95	2052097	50.36 ppb	100.72%
Target Compounds					Qvalue
4) chloromethane	8.21	50	12682	0.79 ppb	94
11) methylene chloride	14.43	84	13024	0.82 ppb #	82
14) Acetone	13.42	43	44402	6.78 ppb	98
20) Vinylacetate	14.15	43	15462	2.78 ppb	100
25) 2-Butanone (MEK)	17.05	72	2837	0.94 ppb #	100
7) chloroform	17.52	83	68687	1.48 ppb	96
.1) bromodichloromethane	20.23	83	34378	0.90 ppb	98
43) toluene	21.34	92	39351	0.81 ppb	95
51) dibromochloromethane	22.60	129	18014	0.56 ppb	95
55) para & meta xylene	23.68	106	7388	0.22 ppb	100
84) 2-methylnapthalene	32.55	142	12752	0.29 ppb #	88

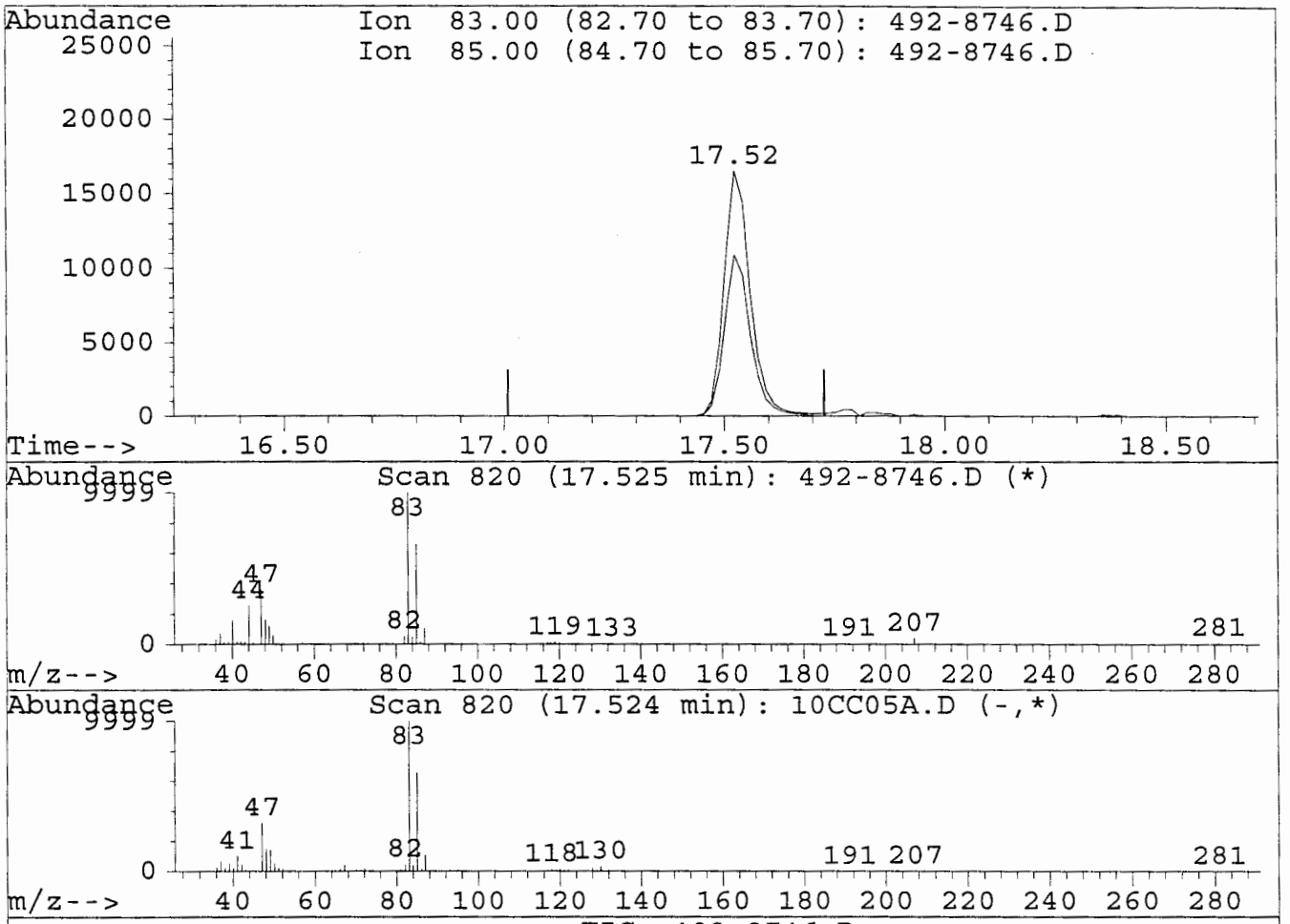
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : L:\HPCHEM\1\DATA\L05OCT98\492-8746.D
Acq On : 5 Oct 98 10:37 pm
Sample : 84492-8746 rr
Misc :
Quant Time: Oct 5 23:11 1998

Vial: 13
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 12 08:44:44 1998
Response via : Multiple Level Calibration



TIC: 492-8746.D

(27) chloroform (C)
17.52min 1.48ppb
response 68687

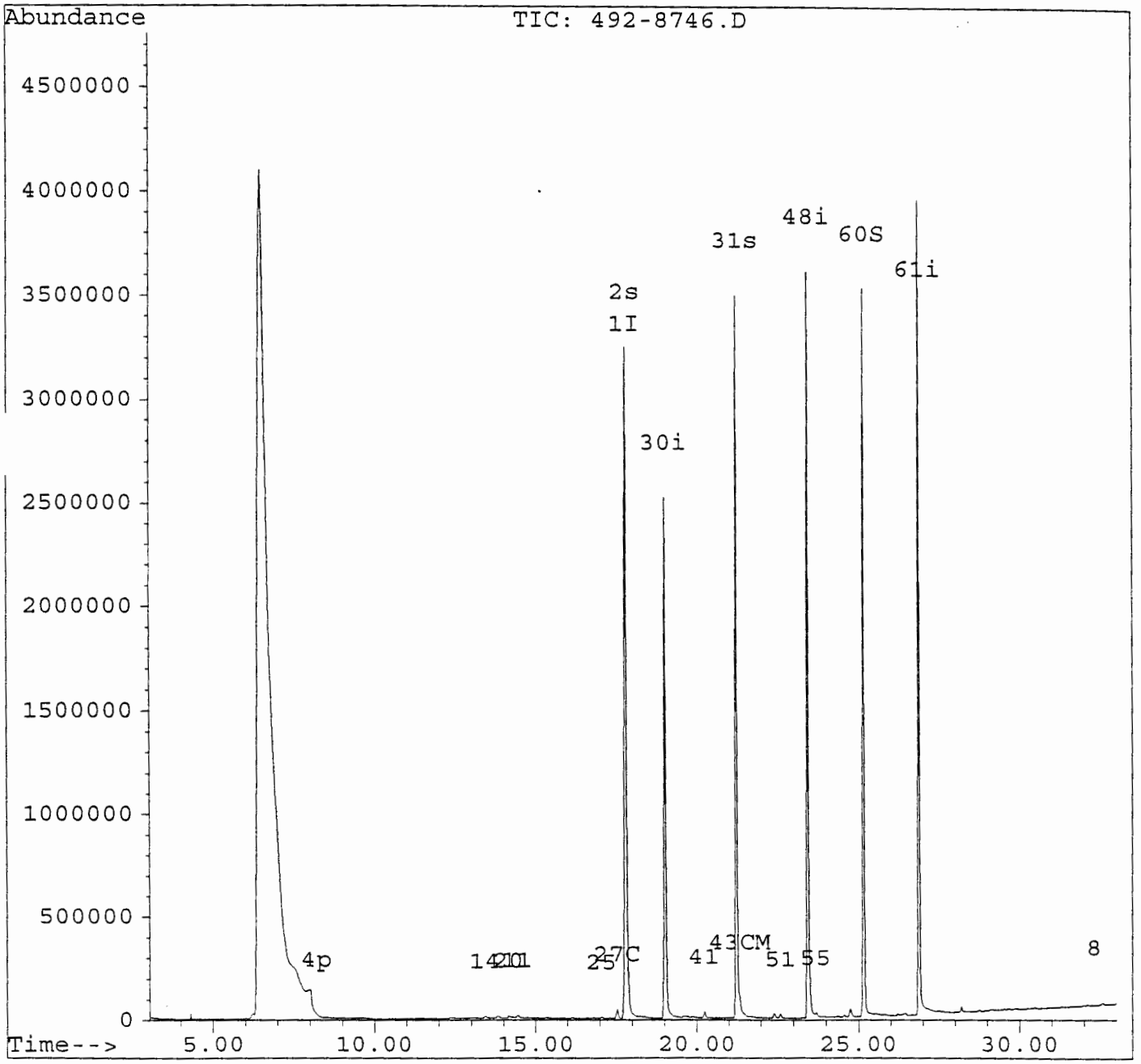
Ion	Exp%	Act%
83.00	100	100
85.00	69.10	66.04
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\492-8746.D
Acq On : 5 Oct 98 10:37 pm
Sample : 84492-8746 rr
Misc :
Quant Time: Oct 5 23:11 1998

Vial: 13
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\492-8747.D
Acq On : 5 Oct 98 11:17 pm
Sample : 84492-8747 rr
Misc :
Quant Time: Oct 5 23:51 1998

Vial: 14
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration

PDC 10/5/98

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	17.79	168	2695605	50.00 ppb		0.09
30) 1,4-Difluorobenzene	19.01	114	3437772	50.00 ppb		0.09
48) Chlorobenzene-d5	23.43	117	3115164	50.00 ppb		0.09
61) 1,4-dichlorobenzene-d4	26.88	152	1482015	50.00 ppb		0.09
System Monitoring Compounds						%Recovery
2) Dibromofluoromethane	17.81	113	1849486	56.59 ppb		113.18%
31) Toluene-d8	21.22	98	3682139	53.58 ppb		107.15%
60) 4-bromofluorobenzene	25.15	95	1865999	49.91 ppb		99.81%
Target Compounds						Qvalue
4) chloromethane	8.21	50	12619	0.82 ppb		91
8) trichlorofluoromethane	11.39	101	5153	0.23 ppb		76
11) methylene chloride	14.43	84	11395	0.74 ppb	#	77
14) Acetone	13.43	43	24992	3.96 ppb	#	86
15) Carbondisulfide	13.64	76	7450	0.25 ppb	#	52
0) Vinylacetate	~~14.15~~	~~43~~	~~43992~~	~~8.21 ppb~~		~~100~~ DRC
25) 2-Butanone (MEK)	17.05	72	3081	1.06 ppb	#	100
29) Allyl chloride	13.64	76	7450	0.25 ppb	#	53 10/1C
32) 4-Methyl-2-pentanone (MIBK	21.03	43	5761	0.25 ppb	#	60
43) toluene	21.33	92	40782	0.88 ppb		92
55) para & meta xylene	23.68	106	16110	0.51 ppb		90
71) 1,2,4-trimethylbenzene	26.21	105	18153	0.28 ppb		85
75) 1,4-dichlorobenzene	26.92	146	10591	0.24 ppb	#	65
77) n-butylbenzene	27.25	91	17393	0.24 ppb		100
79) 1,2,4-trichlorobenzene	29.98	180	11971	0.36 ppb	#	100
80) hexachlorobutadiene	30.10	225	8061	0.40 ppb		96
81) naphthalene	30.45	128	25014	0.39 ppb		100
82) 1,2,3-trichlorobenzene	30.88	180	12567	0.41 ppb		96
84) 2-methylnapthalene	32.56	142	20291	0.50 ppb	#	86

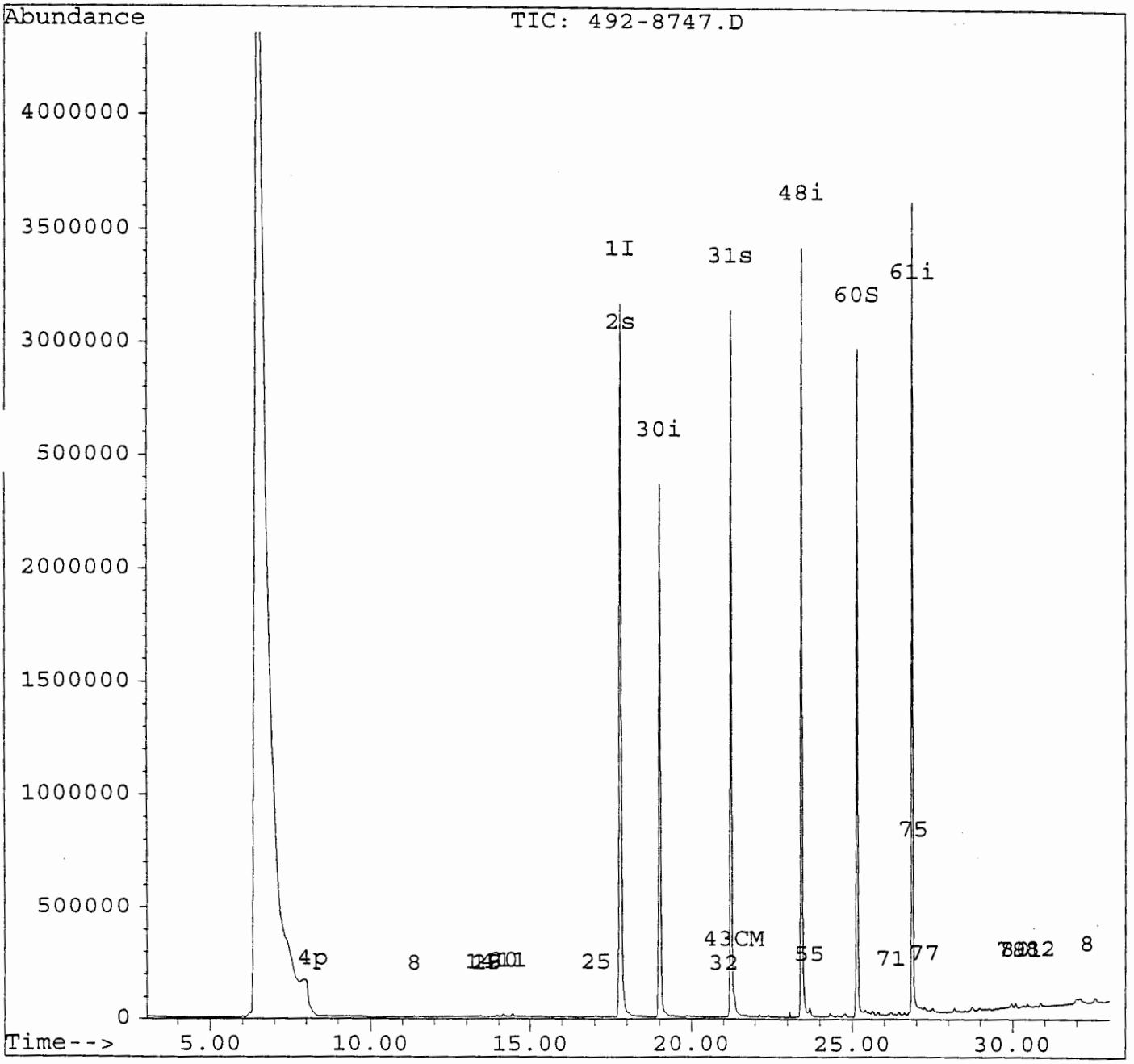
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\492-8747.D
Acq On : 5 Oct 98 11:17 pm
Sample : 84492-8747 rr
Misc :
Quant Time: Oct 5 23:51 1998

Vial: 14
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration

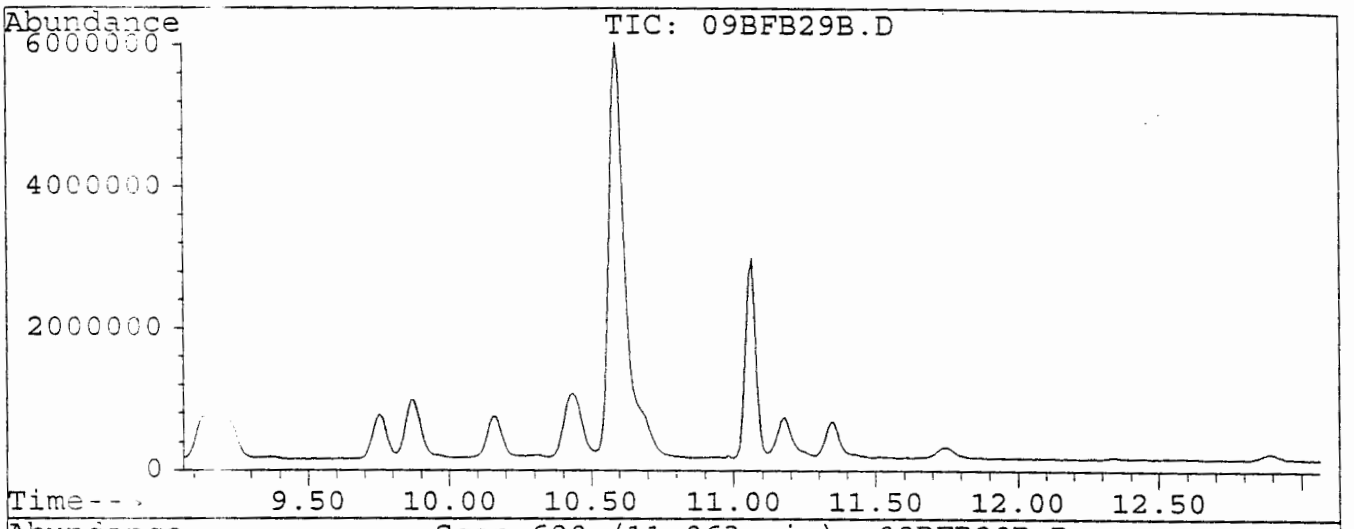


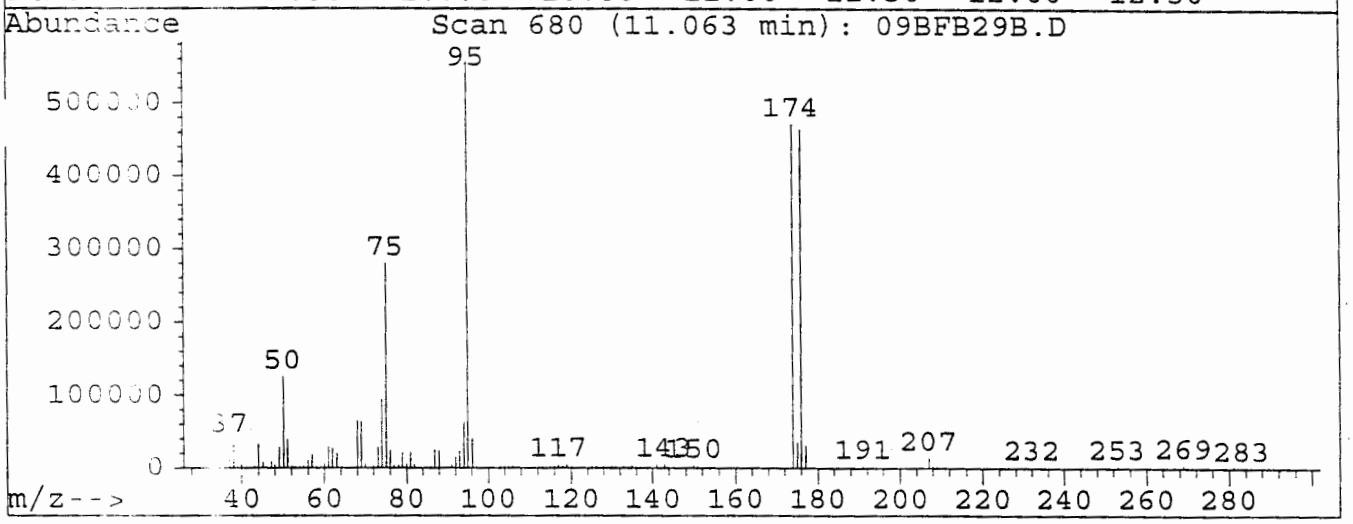
BFB

Data File : C:\HPCHEM\1\DATA\L29SEP98\09BFB29B.D
Acq On : 29 Sep 98 4:03 pm
Sample : BFB TUNE
Misc :

Vial: 1
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W104.M
Title : SW-8260 Purgable Organics





Peak Apex is scan: 680

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.5	125176	PASS
75	95	30	60	50.2	279296	PASS
95	95	100	100	100.0	556096	PASS
96	95	5	9	7.2	39792	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	84.8	471616	PASS
175	174	5	9	7.3	34624	PASS
176	174	95	101	98.3	463744	PASS
177	176	5	9	6.8	31728	PASS

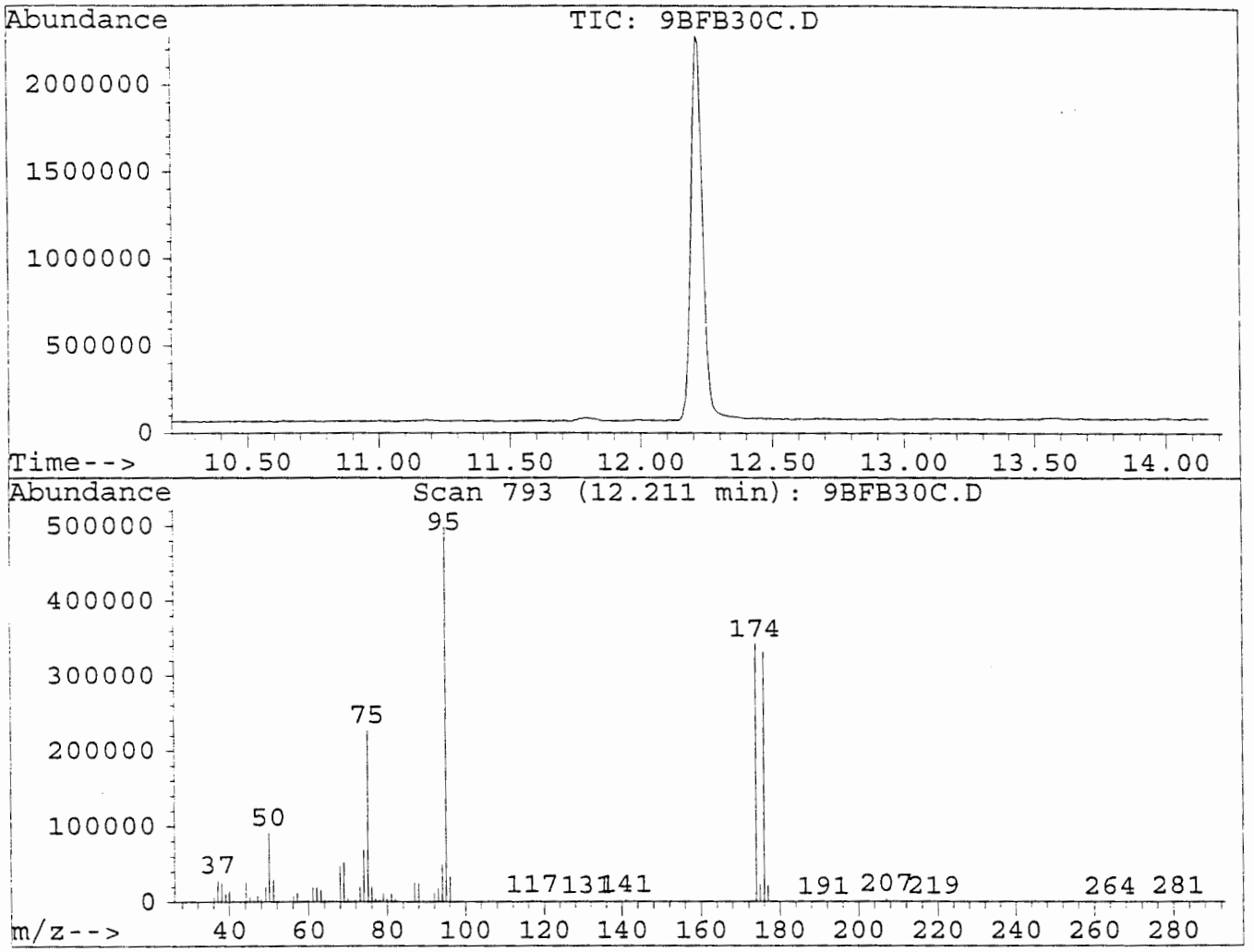
09BFB29B.D 8260W104.M Tue Sep 29 16:23:17 1998 INST-H

BFB

Data File : C:\HPCHEM\1\DATA\H30SEP98\9BFB30C.D
Acq On : 30 Sep 98 3:38 pm
Sample : bfb 50 ng d.i.
Misc :

Vial: 1
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38S.M
Title : SW-8260 Purgable Organics



Peak Apex is scan: 793

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.3	91248	PASS
75	95	30	60	45.4	226624	PASS
95	95	100	100	100.0	499200	PASS
96	95	5	9	6.7	33208	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	68.6	342400	PASS
175	174	5	9	7.0	24024	PASS
176	174	95	101	96.7	331264	PASS
177	176	5	9	6.6	21808	PASS

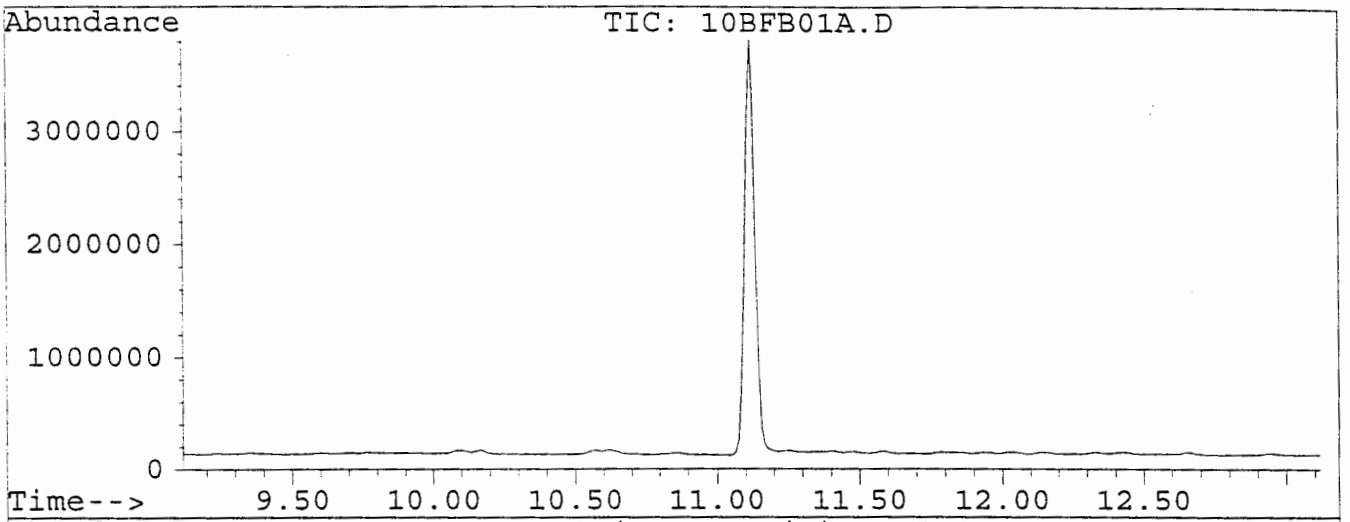
9BFB30C.D 8260S38S.M Wed Sep 30 15:59:02 1998

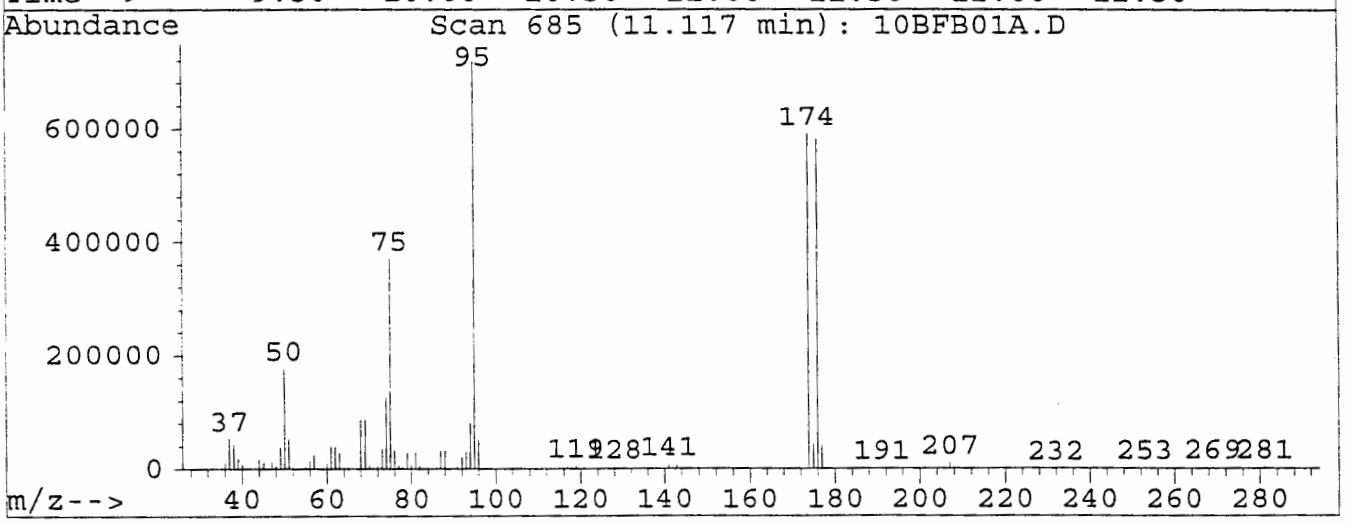
BFB

Data File : L:\HPCHEM\1\DATA\L01OCT98\10BFB01A.D
Acq On : 1 Oct 98 8:11 am
Sample : BFB TUNE
Misc :

Vial: 1
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics





Peak Apex is scan: 685

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.7	176960	PASS
75	95	30	60	51.7	370752	PASS
95	95	100	100	100.0	717632	PASS
96	95	5	9	7.1	51072	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	82.3	590848	PASS
175	174	5	9	7.4	43512	PASS
176	174	95	101	98.4	581504	PASS
177	176	5	9	6.9	40032	PASS

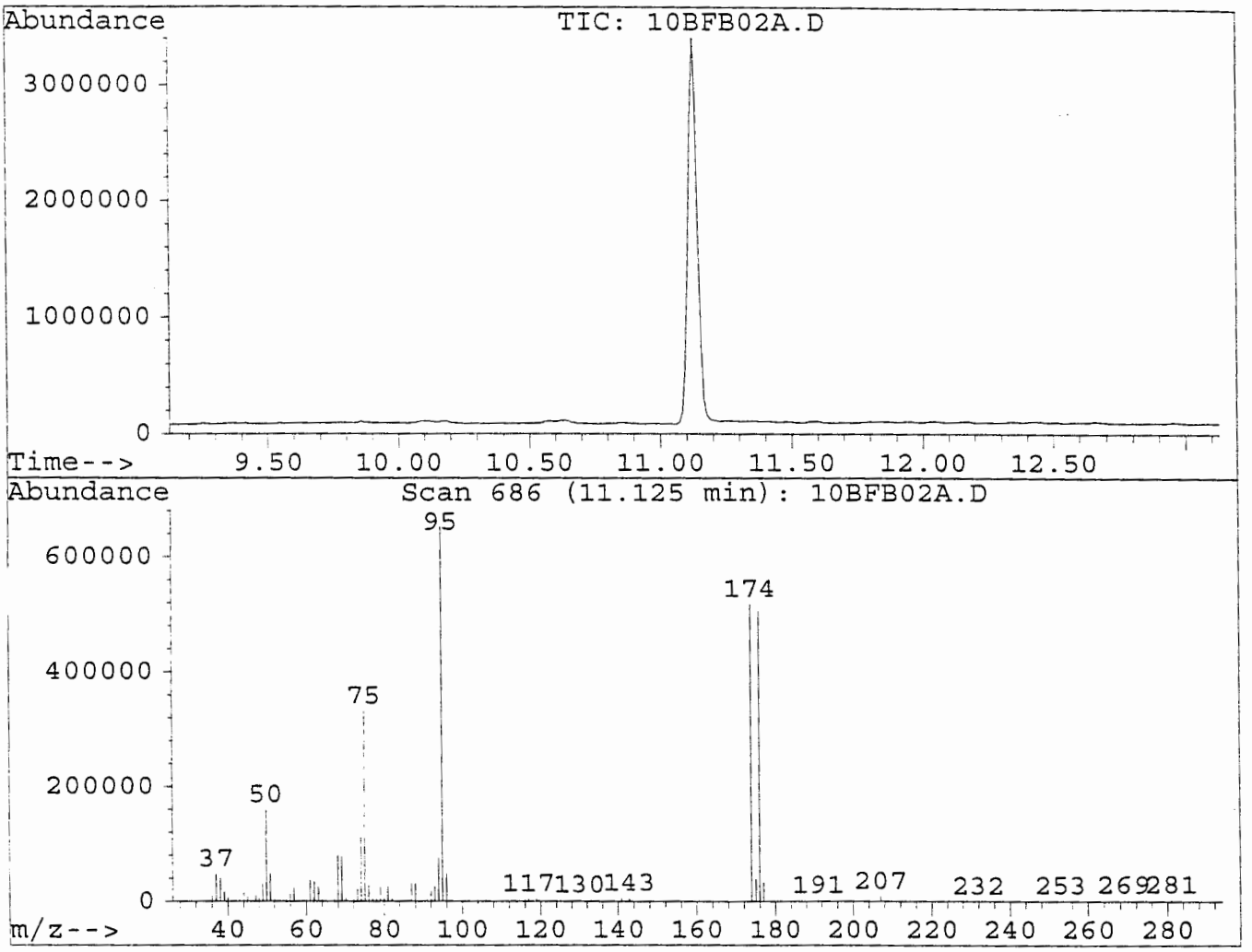
10BFB01A.D 8260W105.M Thu Oct 01 09:09:13 1998

BFB

Data File : L:\HPCHEM\1\DATA\L02OCT98\10BFB02A.D
Acq On : 2 Oct 98 9:11 am
Sample : BFB TUNE
Misc :

Vial: 1
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38S.M
Title : SW-8260 Purgable Organics



Peak Apex is scan: 686

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	24.5	160000	PASS
75	95	30	60	50.9	331904	PASS
95	95	100	100	100.0	652288	PASS
96	95	5	9	7.4	48152	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	79.4	518080	PASS
175	174	5	9	7.6	39392	PASS
176	174	95	101	97.6	505472	PASS
177	176	5	9	6.7	33952	PASS

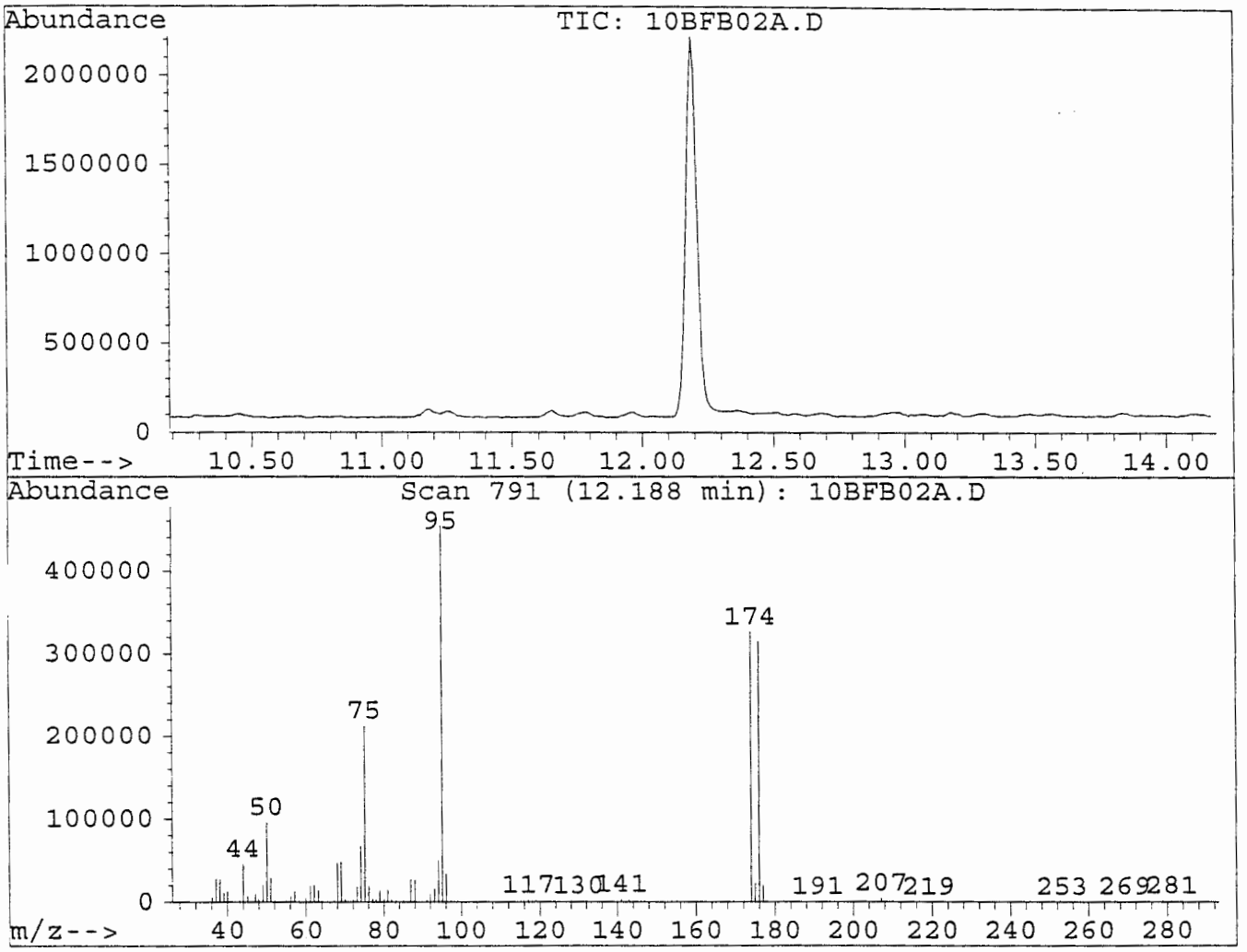
10BFB02A.D 8260S38S.M Fri Oct 02 10:34:11 1998

BFB

Data File : C:\HPCHEM\1\DATA\H02OCT98\10BFB02A.D
Acq On : 2 Oct 98 3:51 pm
Sample : bfb 50 ng d.i.
Misc :

Vial: 1
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics



Peak Apex is scan: 791

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.1	96000	PASS
75	95	30	60	46.8	212736	PASS
95	95	100	100	100.0	454656	PASS
96	95	5	9	7.4	33616	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	71.9	326720	PASS
175	174	5	9	7.0	22832	PASS
176	174	95	101	96.4	314880	PASS
177	176	5	9	6.6	20744	PASS

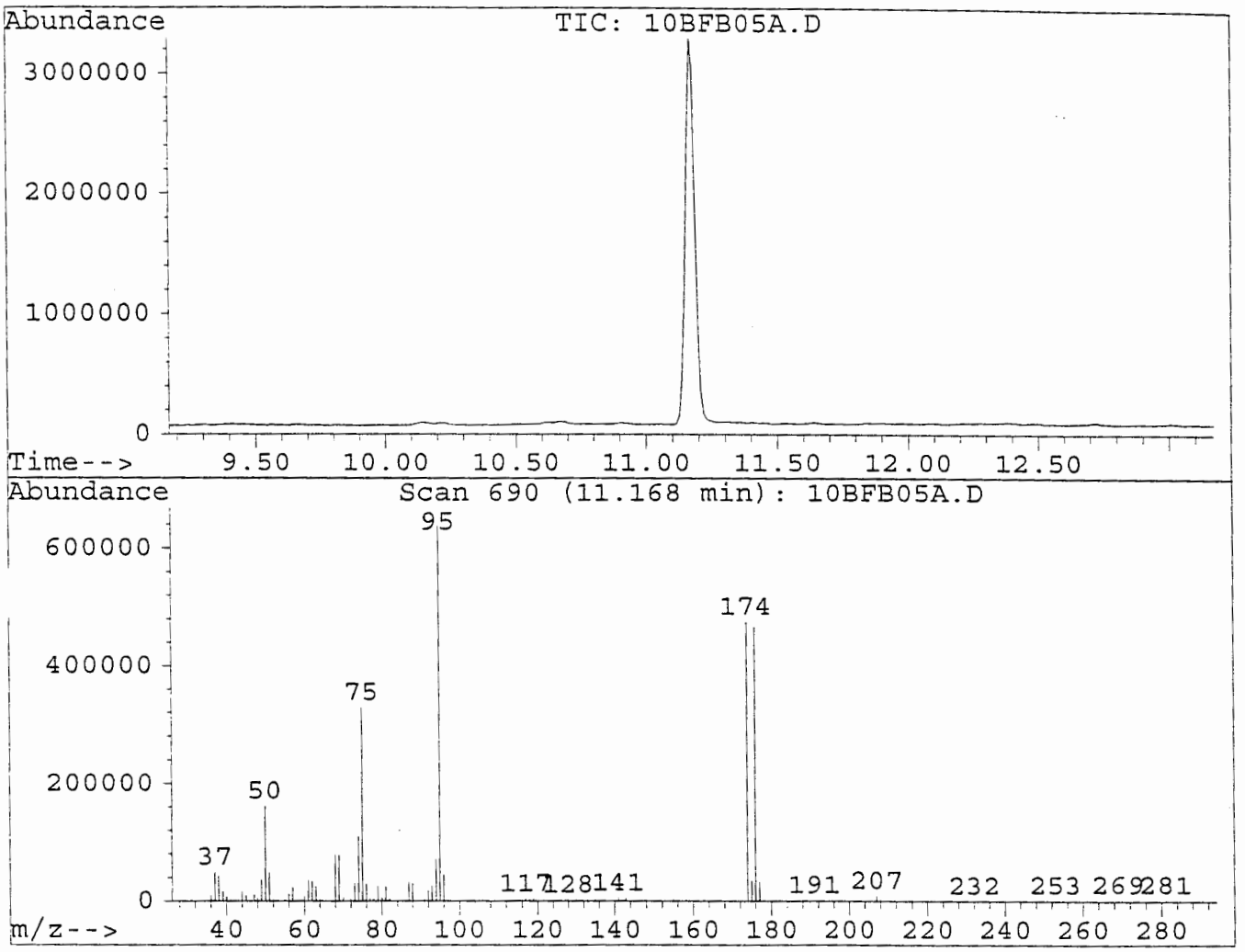
10BFB02A.D 8260W88.M Mon Oct 05 08:27:01 1998

BFB

Data File : L:\HPCHEM\1\DATA\L05OCT98\10BFB05A.D
Acq On : 5 Oct 98 2:10 pm
Sample : BFB TUNE
Misc :

Vial: 1
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics



Peak Apex is scan: 690

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.4	161728	PASS
75	95	30	60	51.7	329088	PASS
95	95	100	100	100.0	636800	PASS
96	95	5	9	7.1	45480	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	74.6	475200	PASS
175	174	5	9	7.4	35040	PASS
176	174	95	101	98.3	467008	PASS
177	176	5	9	7.0	32896	PASS

10BFB05A.D 8260W105.M Mon Oct 05 15:39:28 1998

Response Factor Report 5972-INST

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 16:08:22 1998
Response via : Initial Calibration

Calibration Files

100	=IC1.D	50	=IC2.D	25	=IC3.D
10	=IC4.D	5	=IC5.D	1	=IC6.D

		Compound	100	50	25	10	5	1	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------							
2)	s	Dibromofluoromethan	0.569	0.600	0.604	0.634	0.615	0.615	0.606	3.59
3)		dichlorodifluoromet	0.689	0.608	0.650	0.758	0.724	0.759	0.698	8.71
4)	p	chloromethane	0.212	0.214	0.298	0.297	0.253	0.446	0.287	30.19
5)	C	vinyl chloride	0.238	0.204	0.239	0.275	0.249	0.257	0.244	9.72
6)		bromomethane	0.060	0.064	0.083	0.056	0.067	0.147	0.080	43.09
7)		chloroethane	0.050	0.052	0.071	0.054	0.059	0.079	0.061	18.95
8)		trichlorofluorometh	0.367	0.373	0.438	0.432	0.418	0.486	0.419	10.60
9)		Methyliodide	0.462	0.474	0.541	0.567	0.522	0.561	0.521	8.53
10)	CM	1,1-dichloroethene	0.160	0.151	0.170	0.179	0.168	0.195	0.170	9.03
11)		methylene chloride	0.158	0.163	0.422	0.262	0.264	0.435	0.284	42.71
12)		trans-1,2-dichloroe	0.411	0.382	0.408	0.423	0.378	0.445	0.408	6.22
13)		Ethylether	0.068	0.068	0.079	0.079	0.077	0.086	0.076	9.32
14)		Acetone	0.097	0.096	0.106	0.108	0.111	0.183	0.117	27.97
15)		Carbondisulfide	0.509	0.520	0.593	0.615	0.563	0.579	0.563	7.42
16)		Acrolein	0.363	0.340	0.357	0.334	0.307	0.350	0.342	5.88
		Acrylonitrile	0.106	0.101	0.107	0.109	0.099	0.112	0.106	4.48
		Diisopropylether	0.385	0.376	0.406	0.399	0.361	0.387	0.386	4.16
19)		Methyl-tert-butyl E	0.597	0.593	0.687	0.678	0.599	0.626	0.630	6.70
20)		Vinylacetate	0.093	0.093	0.098	0.105	0.096	0.112	0.099	7.40
21)	p	1,1-dichloroethane	0.796	0.803	0.876	0.898	0.820	0.894	0.848	5.50
22)		2,2-dichloropropane	0.422	0.399	0.461	0.432	0.384	0.391	0.415	7.03
23)		cis-1,2-dichloroeth	0.447	0.414	0.440	0.451	0.401	0.429	0.430	4.60
24)		bromochloromethane	0.272	0.247	0.261	0.257	0.233	0.257	0.255	5.14
25)		2-Butanone (MEK)	0.054	0.052	0.054	0.054	0.050	0.058	0.054	4.94
26)		Tetrahydrofuran	0.042	0.042	0.044	0.046	0.043	0.050	0.044	6.68
27)	C	chloroform	0.832	0.779	0.846	0.863	0.790	0.849	0.827	4.12
28)		1,1,1-trichloroetha	0.611	0.583	0.656	0.644	0.601	0.670	0.628	5.44
29)		Allyl chloride	0.496	0.512	0.587	0.608	0.558	0.570	0.555	7.81
30)	i	1,4-Difluorobenzene	----------ISTD----------							
31)	s	Toluene-d8	0.998	0.983	1.015	1.004	0.989	1.009	1.000	1.23
32)		4-Methyl-2-pentanon	0.334	0.326	0.354	0.330	0.298	0.356	0.333	6.38
33)		2-Chloroethyl Vinyl	0.153	0.126	0.126	0.113	0.099	0.120	0.123	14.43
34)		carbon tetrachlorid	0.457	0.440	0.472	0.443	0.406	0.434	0.442	5.02
35)		1,1-dichloropropene	0.420	0.410	0.452	0.434	0.417	0.477	0.435	5.85
36)	M	benzene	1.083	1.008	1.136	1.099	1.035	1.138	1.083	4.91
37)		1,2-dichloroethane	0.447	0.423	0.478	0.466	0.431	0.476	0.453	5.18
38)	M	trichloroethene	0.398	0.376	0.424	0.412	0.387	0.483	0.413	9.27
39)	C	1,2-dichloropropane	0.327	0.329	0.382	0.357	0.338	0.384	0.353	7.24
40)		dibromomethane	0.274	0.259	0.291	0.276	0.253	0.289	0.274	5.59
41)		bromodichloromethan	0.549	0.504	0.563	0.532	0.484	0.510	0.524	5.63
		cis-1,3-dichloropro	0.532	0.474	0.517	0.481	0.429	0.462	0.483	7.76

(#) = Out of Range

Response Factor Report 5972-INST

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 16:08:22 1998
Response via : Initial Calibration

Calibration Files
100 =IC1.D 50 =IC2.D 25 =IC3.D
10 =IC4.D 5 =IC5.D 1 =IC6.D

		Compound	100	50	25	10	5	1	Avg	%RSD
43)	CM	toluene	0.653	0.617	0.703	0.654	0.627	0.782	0.673	9.08
44)		trans-1,3-dichlorop	0.427	0.378	0.409	0.373	0.335	0.356	0.380	8.89
45)		1,1,2-trichloroetha	0.271	0.254	0.286	0.254	0.244	0.285	0.266	6.66
46)		1,2-Dibromoethane	0.386	0.361	0.404	0.358	0.330	0.369	0.368	6.95
47)		1,4-dichloro-2-bute	0.037	0.042	0.050	0.042	0.038	0.037	0.041	12.32
48)	i	Chlorobenzene-d5	----------ISTD----------							
49)		tetrachloroethene	0.553	0.617	0.719	0.697	0.690	0.902	0.696	16.94
50)		1,3-dichloropropane	0.545	0.506	0.561	0.506	0.491	0.563	0.529	5.89
51)		dibromochloromethan	0.534	0.482	0.503	0.454	0.421	0.430	0.471	9.29
52)	pM	chlorobenzene	0.861	0.864	0.959	0.900	0.864	1.044	0.915	8.01
53)		1,1,1,2-tetrachloro	0.415	0.395	0.413	0.389	0.354	0.362	0.388	6.55
54)	C	ethylbenzene	1.268	1.368	1.543	1.431	1.397	1.763	1.462	11.81
55)		para & meta xylene	0.395	0.478	0.552	0.521	0.494	0.594	0.506	13.50
56)		ortho xylene	0.453	0.500	0.561	0.535	0.489	0.562	0.517	8.45
57)		styrene	0.741	0.809	0.921	0.861	0.798	0.884	0.836	7.80
58)		2-Hexanone (MBK)	0.334	0.338	0.363	0.335	0.299	0.327	0.333	6.15
	p	bromoform	0.374	0.343	0.350	0.307	0.273	0.269	0.319	13.51
	S	4-bromofluorobenzen	0.601	0.588	0.613	0.601	0.604	0.593	0.600	1.46
61)	i	1,4-dichlorobenzene-d	----------ISTD----------							
62)		Isopropyl benzene	2.497	2.500	2.735	2.598	2.510	3.019	2.643	7.77
63)		bromobenzene	0.698	0.778	0.871	0.775	0.753	0.950	0.804	11.29
64)	p	1,1,2,2-tetrachloro	0.941	0.864	0.927	0.856	0.837	0.941	0.894	5.28
65)		1,2,3-trichloroprop	0.689	0.776	0.885	0.800	0.784	0.977	0.819	12.17
66)		n-propylbenzene	2.500	2.972	3.533	3.216	3.230	3.992	3.241	15.56
67)		2-chlorotoluene	1.694	2.034	2.340	2.236	2.180	2.600	2.181	13.94
68)		4-chlorotoluene	2.012	1.922	2.124	2.005	1.947	2.389	2.066	8.36
69)		1,3,5-trimethylbenz	1.639	1.997	2.283	2.167	2.064	2.482	2.105	13.57
70)		tert-butylbenzene	2.183	2.001	2.438	2.242	2.117	2.522	2.250	8.74
71)		1,2,4-trimethylbenz	2.095	2.063	2.296	2.172	2.094	2.546	2.211	8.34
72)		sec-butylbenzene	2.799	2.774	2.985	2.802	2.681	3.320	2.894	7.99
73)		1,3-dichlorobenzene	1.439	1.334	1.418	1.303	1.252	1.588	1.389	8.63
74)		p-isopropyltoluene	2.432	2.515	2.700	2.541	2.388	2.808	2.564	6.28
75)		1,4-dichlorobenzene	1.458	1.397	1.512	1.394	1.373	1.766	1.483	9.95
76)		1,2-dichlorobenzene	1.430	1.313	1.387	1.285	1.219	1.500	1.356	7.57
77)		n-butylbenzene	2.325	2.339	2.532	2.321	2.191	2.718	2.404	7.85
78)		1,2-dibromo-3-chlor	0.181	0.168	0.175	0.157	0.148	0.005	0.139	47.91
79)		1,2,4-trichlorobenz	1.208	1.114	1.133	1.043	0.985	1.266	1.125	9.17
80)		hexachlorobutadiene	0.759	0.697	0.697	0.578	0.553	0.834	0.686	15.52
81)		naphthalene	2.342	2.157	2.195	1.983	1.824	2.456	2.160	10.69
82)		1,2,3-trichlorobenz	1.106	1.024	1.038	0.963	0.885	1.193	1.035	10.38
83)		hexachloroethane	0.409	0.333	0.287	0.230	0.185	0.138	0.264	37.83
		2-methylnapthalene	1.442	1.315	1.306	1.192	1.095	1.809	1.360	18.36

(#) = Out of Range

Quantitation Report

Data File : L:\HPCHEM\1\DATA\L29SEP98\IC1.D
Acq On : 29 Sep 98 5:26 pm
Sample : 100 PPB
Misc :
Quant Time: Sep 30 16:03 1998

Vial: 1
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 09:38:06 1998
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	17.70	168	3142959	50.00 ppb		0.00
30) 1,4-Difluorobenzene	18.92	114	4228549	50.00 ppb		0.00
48) Chlorobenzene-d5	23.34	117	3763611	50.00 ppb		0.00
61) 1,4-dichlorobenzene-d4	26.79	152	2070761	50.00 ppb		0.00
System Monitoring Compounds						%Recovery
2) Dibromofluoromethane	17.72	113	1788044	22.29 ppb		44.59%
31) Toluene-d8	21.15	98	4220473	40.45 ppb		80.91%
60) 4-bromofluorobenzene	25.04	95	2260289	22.82 ppb		45.64%
Target Compounds						Qvalue
3) dichlorodifluoromethane	7.20	85	4332686	20.06 ppb		100
4) chloromethane	8.06	50	1333097	16.74 ppb		100
5) vinyl chloride	8.63	62	1494100	11.16 ppb		100
6) bromomethane	10.10	94	378495	3.92 ppb		100
7) chloroethane	10.56	64	313813	3.86 ppb		100
8) trichlorofluoromethane	11.30	101	2309565	5.54 ppb		100
9) Methyliodide	13.44	142	2901675	17.35 ppb		100
10) 1,1-dichloroethene	12.96	96	1003322	11.41 ppb		100
11) methylene chloride	14.34	84	991389	25.01 ppb		100
12) trans-1,2-dichloroethene	14.84	96	2584969	69.86 ppb		100
13) Ethylether	12.33	74	427855	8.41 ppb		100
14) Acetone	13.33	43	609308	7.36 ppb		100
15) Carbondisulfide	13.55	76	3196447	10.90 ppb		99
16) Acrolein	17.05	55	2281939	51.59 ppb		100
17) Acrylonitrile	15.05	52	664106	61.72 ppb		100
18) Diisopropylether	15.76	87	2419307	54.27 ppb		98
19) Methyl-tert-butyl Ether (M	14.82	73	3753882	29.53 ppb	#	100
20) Vinylacetate	14.06	43	584364	2.90 ppb		100
21) 1,1-dichloroethane	15.83	63	5005667	40.67 ppb		100
22) 2,2-dichloropropane	16.87	77	2651068	24.97 ppb		96
23) cis-1,2-dichloroethene	16.92	96	2811440	77.16 ppb		95
24) bromochloromethane	17.37	128	1707536	105.87 ppb		99
25) 2-Butanone (MEK)	16.96	72	341985	68.61 ppb	#	100
26) Tetrahydrofuran	17.40	72	264683	60.25 ppb	#	1
27) chloroform	17.44	83	5232381	36.96 ppb		96
28) 1,1,1-trichloroethane	17.74	97	3842682	22.30 ppb		98
29) Allyl chloride	13.55	76	3117111	10.72 ppb	#	98
32) 4-Methyl-2-pentanone (MIBK	20.96	43	2823596	52.56 ppb	#	80
33) 2-Chloroethyl Vinyl Ether	20.50	63	1291739	79.84 ppb		100
34) carbon tetrachloride	17.95	117	3861136	31.30 ppb		95
35) 1,1-dichloropropene	17.98	75	3555559	46.98 ppb		88
36) benzene	18.34	78	9159408	89.43 ppb		97
37) 1,2-dichloroethane	18.46	62	3777194	28.70 ppb		90

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : L:\HPCHEM\1\DATA\L29SEP98\IC1.D
Acq On : 29 Sep 98 5:26 pm
Sample : 100 PPB
Misc :
Quant Time: Sep 30 16:03 1998

Vial: 1
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 09:38:06 1998
Response via : Single Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	trichloroethene	19.33	95	3363863	50.68	ppb	#	61
39)	1,2-dichloropropane	19.77	63	2762685	64.77	ppb		80
40)	dibromomethane	19.96	93	2315055	49.59	ppb	#	87
41)	bromodichloromethane	20.14	83	4645065	39.58	ppb		97
42)	cis-1,3-dichloropropene	20.80	75	4498916	65.78	ppb		72
43)	toluene	21.24	92	5521754	80.82	ppb		98
44)	trans-1,3-dichloropropene	21.61	75	3612040	55.22	ppb		90
45)	1,1,2-trichloroethane	21.91	83	2295729	80.32	ppb	#	70
46)	1,2-Dibromoethane	22.74	107	3266235	69.21	ppb	#	100
47)	1,4-dichloro-2-butene	25.29	53	314109	33.10	ppb	#	13
49)	tetrachloroethene	22.03	166	4161297	87.87	ppb	#	82
50)	1,3-dichloropropane	22.18	76	4100395	59.39	ppb		98
51)	dibromochloromethane	22.49	129	4017281	63.40	ppb		97
52)	chlorobenzene	23.38	112	6478535	76.55	ppb		82
53)	1,1,1,2-tetrachloroethane	23.48	131	3122133	62.30	ppb		100
54)	ethylbenzene	23.43	91	9542721	46.68	ppb		100
5)	para & meta xylene	23.59	106	5953433	104.64	ppb		100
5)	ortho xylene	24.21	106	3407987	61.79	ppb		100
57)	styrene	24.24	104	5580171	60.57	ppb		100
58)	2-Hexanone (MBK)	22.14	43	2515707	47.83	ppb	#	65
59)	bromoform	24.63	173	2818714	69.58	ppb		96
62)	Isopropyl benzene	24.69	105	10343059	48.84	ppb	#	79
63)	bromobenzene	25.34	156	2889292	83.79	ppb	#	1
64)	1,1,2,2-tetrachloroethane	25.22	83	3898142	77.38	ppb	#	1
65)	1,2,3-trichloropropane	25.36	75	2853106	36.35	ppb	#	1
66)	n-propylbenzene	25.29	91	10354645	37.47	ppb		83
67)	2-chlorotoluene	25.55	91	7016037	30.81	ppb	#	87
68)	4-chlorotoluene	25.71	91	8334621	42.74	ppb	#	85
69)	1,3,5-trimethylbenzene	25.52	105	6786281	34.57	ppb	#	1
70)	tert-butylbenzene	26.05	119	9042597	53.34	ppb	#	100
71)	1,2,4-trimethylbenzene	26.12	105	8675766	42.94	ppb		76
72)	sec-butylbenzene	26.37	105	11592325	49.36	ppb	m	100
73)	1,3-dichlorobenzene	26.68	146	5958663	95.79	ppb		92
74)	p-isopropyltoluene	26.54	119	10073623	51.95	ppb	#	33
75)	1,4-dichlorobenzene	26.83	146	6038077	89.62	ppb	#	1
76)	1,2-dichlorobenzene	27.43	146	5924185	96.87	ppb	#	100
77)	n-butylbenzene	27.16	91	9627203	41.47	ppb	#	100
78)	1,2-dibromo-3-chloropropan	28.61	75	750682	33.20	ppb	#	1
79)	1,2,4-trichlorobenzene	29.87	180	5002800	93.82	ppb	#	100
80)	hexachlorobutadiene	29.99	225	3144922	38.41	ppb		100
81)	naphthalene	30.34	128	9700430	99.19	ppb		100
82)	1,2,3-trichlorobenzene	30.77	180	4579898	90.31	ppb		100
3)	hexachloroethane	27.76	201	1693677	115.00	ppb	#	100
4)	2-methylnapthalene	32.43	142	5972573	117.39	ppb		99

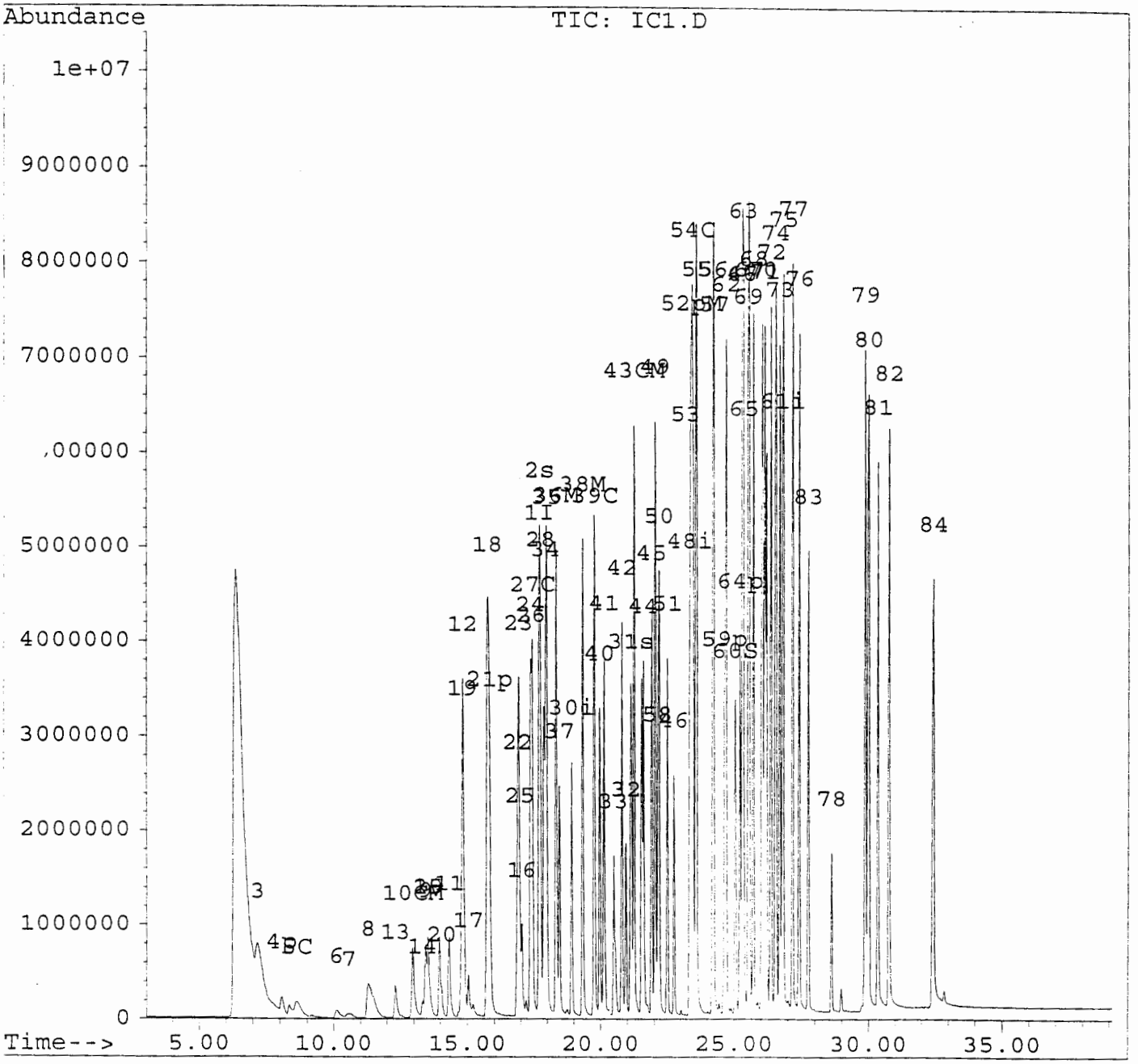
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : L:\HPCHEM\1\DATA\L29SEP98\IC1.D
Acq On : 29 Sep 98 5:26 pm
Sample : 100 PPB
Misc :
Quant Time: Sep 30 16:03 1998

Vial: 1
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 09:38:06 1998
Response via : Single Level Calibration



Quantitation Report

Data File : L:\HPCHEM\1\DATA\L29SEP98\IC2.D
Acq On : 29 Sep 98 6:14 pm
Sample : 50 PPB
Misc :
Quant Time: Sep 30 16:07 1998

Vial: 2
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 16:08:22 1998
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	17.70	168	3380139	50.00	ppb		0.00
30) 1,4-Difluorobenzene	18.92	114	4520399	50.00	ppb		0.00
48) Chlorobenzene-d5	23.34	117	4073371	50.00	ppb		0.00
61) 1,4-dichlorobenzene-d4	26.79	152	2284757	50.00	ppb		0.00
System Monitoring Compounds							**%Recovery**
2) Dibromofluoromethane	17.72	113	2027907	23.51	ppb		47.02%
31) Toluene-d8	21.13	98	4441573	39.82	ppb		79.65%
60) 4-bromofluorobenzene	25.04	95	2395140	22.34	ppb		44.69%
Target Compounds							**Qvalue**
3) dichlorodifluoromethane	7.20	85	2054467	8.84	ppb		100
4) chloromethane	8.06	50	724226	8.46	ppb		100
5) vinyl chloride	8.59	62	690083	4.79	ppb		99
6) bromomethane	10.12	94	215680	2.08	ppb		98
7) chloroethane	10.54	64	175192	2.01	ppb		100
8) trichlorofluoromethane	11.30	101	1261159	2.81	ppb		100
9) Methyliodide	13.44	142	1603707	8.91	ppb		99
10) 1,1-dichloroethene	12.96	96	509900	5.39	ppb		97
11) methylene chloride	14.32	84	549830	12.90	ppb		99
12) trans-1,2-dichloroethene	14.84	96	1289883	32.42	ppb		96
13) Ethylether	12.31	74	230114	4.20	ppb		100
14) Acetone	13.33	43	325915	3.66	ppb		99
15) Carbondisulfide	13.53	76	1758102	5.57	ppb		99
16) Acrolein	17.03	55	1148337	24.14	ppb		100
17) Acrylonitrile	15.05	52	341344	29.50	ppb		100
18) Diisopropylether	15.76	87	1270523	26.50	ppb		81
19) Methyl-tert-butyl Ether (M	14.82	73	2005142	14.66	ppb	#	100
20) Vinylacetate	14.06	43	314375	1.45	ppb		100
21) 1,1-dichloroethane	15.81	63	2714949	20.51	ppb		99
22) 2,2-dichloropropane	16.87	77	1350132	11.83	ppb		96
23) cis-1,2-dichloroethene	16.91	96	1398555	35.69	ppb	#	86
24) bromochloromethane	17.35	128	835389	48.16	ppb	#	84
25) 2-Butanone (MEK)	16.96	72	176252	32.88	ppb	#	100
26) Tetrahydrofuran	17.40	72	140311	29.70	ppb	#	1
27) chloroform	17.44	83	2634062	17.30	ppb		96
28) 1,1,1-trichloroethane	17.72	97	1971149	10.64	ppb	#	67
29) Allyl chloride	13.53	76	1732296	5.54	ppb	#	98
32) 4-Methyl-2-pentanone (MIBK	20.94	43	1472976	25.65	ppb	#	79
33) 2-Chloroethyl Vinyl Ether	20.49	63	570223	32.97	ppb		100
34) carbon tetrachloride	17.95	117	1989041	15.08	ppb		94
35) 1,1-dichloropropene	17.98	75	1854317	22.92	ppb		88
36) benzene	18.34	78	4554671	41.60	ppb		97
37) 1,2-dichloroethane	18.46	62	1911571	13.59	ppb		91

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : L:\HPCHEM\1\DATA\L29SEP98\IC2.D
Acq On : 29 Sep 98 6:14 pm
Sample : 50 PPB
Misc :
Quant Time: Sep 30 16:07 1998

Vial: 2
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 16:08:22 1998
Response via : Single Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	trichloroethene	19.33	95	1700768	23.97 ppb	#	62
39)	1,2-dichloropropane	19.75	63	1485851	32.58 ppb		78
40)	dibromomethane	19.96	93	1172357	23.49 ppb	#	87
41)	bromodichloromethane	20.12	83	2277693	18.15 ppb		97
42)	cis-1,3-dichloropropene	20.78	75	2144414	29.33 ppb		69
43)	toluene	21.24	92	2788513	38.18 ppb		100
44)	trans-1,3-dichloropropene	21.61	75	1708312	24.43 ppb		89
45)	1,1,2-trichloroethane	21.89	83	1146624	37.53 ppb	#	67
46)	1,2-Dibromoethane	22.74	107	1630583	32.32 ppb	#	100
47)	1,4-dichloro-2-butene	25.29	53	190388	18.77 ppb	#	11
49)	tetrachloroethene	22.03	166	2514856	49.07 ppb	#	83
50)	1,3-dichloropropane	22.17	76	2060798	27.58 ppb		97
51)	dibromochloromethane	22.49	129	1964574	28.65 ppb		97
52)	chlorobenzene	23.38	112	3521018	38.44 ppb	#	82
53)	1,1,1,2-tetrachloroethane	23.47	131	1610137	29.69 ppb		98
54)	ethylbenzene	23.43	91	5571907	25.18 ppb		99
5)	para & meta xylene	23.59	106	3890767	63.19 ppb		93
6)	ortho xylene	24.21	106	2034823	34.09 ppb		99
57)	styrene	24.23	104	3295978	33.06 ppb		95
58)	2-Hexanone (MBK)	22.14	43	1377332	24.20 ppb	#	66
59)	bromoform	24.63	173	1396360	31.85 ppb		97
62)	Isopropyl benzene	24.69	105	5711218	24.44 ppb	#	78
63)	bromobenzene	25.32	156	1778528	46.75 ppb	#	1
64)	1,1,2,2-tetrachloroethane	25.22	83	1974212	35.52 ppb	#	1
65)	1,2,3-trichloropropane	25.34	75	1773560	20.48 ppb	#	1
66)	n-propylbenzene	25.30	91	6790412	22.27 ppb		85
67)	2-chlorotoluene	25.55	91	4647405	18.50 ppb	#	85
68)	4-chlorotoluene	25.71	91	4391398	20.41 ppb	#	85
69)	1,3,5-trimethylbenzene	25.53	105	4563207	21.07 ppb	#	1
70)	tert-butylbenzene	26.03	119	4571221	24.44 ppb	#	100
71)	1,2,4-trimethylbenzene	26.12	105	4712769	21.14 ppb		76
72)	sec-butylbenzene	26.37	105	6338300	24.46 ppb	m	100
73)	1,3-dichlorobenzene	26.68	146	3048747	44.42 ppb		92
74)	p-isopropyltoluene	26.54	119	5745029	26.85 ppb	#	32
75)	1,4-dichlorobenzene	26.83	146	3192934	42.95 ppb	#	1
76)	1,2-dichlorobenzene	27.43	146	3000362	44.46 ppb	#	100
77)	n-butylbenzene	27.16	91	5344835	20.87 ppb	#	100
78)	1,2-dibromo-3-chloropropan	28.61	75	384787	15.43 ppb	#	1
79)	1,2,4-trichlorobenzene	29.87	180	2544505	43.25 ppb	#	100
80)	hexachlorobutadiene	29.99	225	1592778	17.63 ppb		98
81)	naphthalene	30.34	128	4927832	45.67 ppb		100
82)	1,2,3-trichlorobenzene	30.75	180	2338626	41.80 ppb		100
3)	hexachloroethane	27.76	201	760827	46.82 ppb	#	100
4)	2-methylnapthalene	32.41	142	3004130	53.52 ppb		98

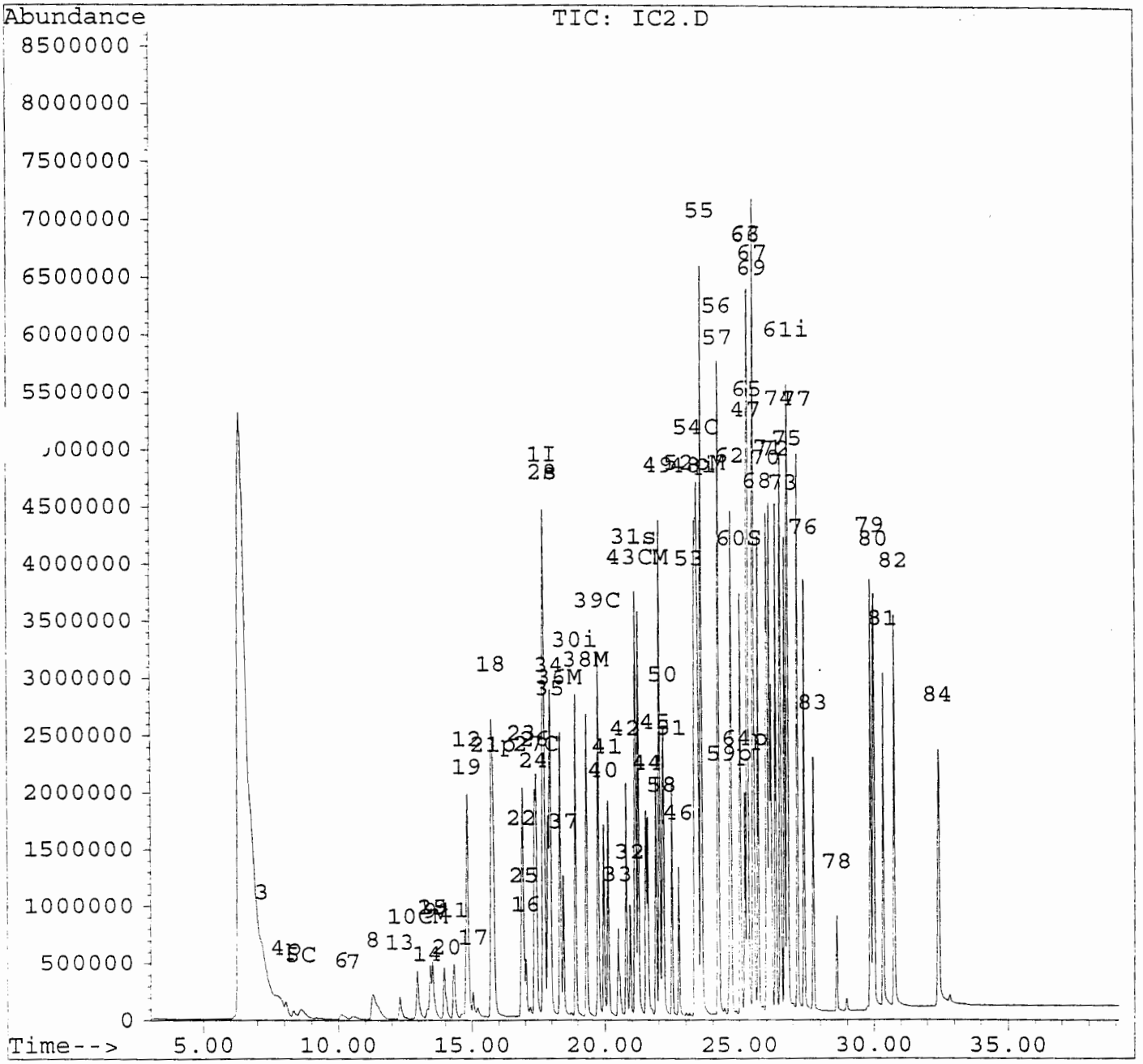
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : L:\HPCHEM\1\DATA\L29SEP98\IC2.D
Acq On : 29 Sep 98 6:14 pm
Sample : 50 PPB
Misc :
Quant Time: Sep 30 16:07 1998

Vial: 2
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 16:08:22 1998
Response via : Single Level Calibration



Quantitation Report

Data File : L:\HPCHEM\1\DATA\L29SEP98\IC3.D
Acq On : 29 Sep 98 7:01 pm
Sample : 25 PPB
Misc :
Quant Time: Sep 30 7:25 1998

Vial: 3
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W104.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 07:22:29 1998
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	17.69	168	2812697	50.00 ppb	-0.02
30) 1,4-Difluorobenzene	18.91	114	3601322	50.00 ppb	-0.02
48) Chlorobenzene-d5	23.33	117	3356424	50.00 ppb	-0.02
61) 1,4-dichlorobenzene-d4	26.77	152	1888335	50.00 ppb	-0.02
System Monitoring Compounds					%Recovery
2) Dibromofluoromethane	17.72	113	1699023	23.67 ppb	47.34%
31) Toluene-d8	21.13	98	3656030	41.15 ppb	82.29%
60) 4-bromofluorobenzene	25.04	95	2058515	23.31 ppb	46.61%
Target Compounds					Qvalue
3) dichlorodifluoromethane	7.20	85	914406	4.73 ppb	100
4) chloromethane	8.07	50	418638	5.88 ppb	99
5) vinyl chloride	8.61	62	336810	2.81 ppb	100
6) bromomethane	10.12	94	117039	1.35 ppb	95
7) chloroethane	10.56	64	99375	1.37 ppb	99
8) trichlorofluoromethane	11.30	101	616634	1.65 ppb	98
9) Methyliodide	13.44	142	761252	5.09 ppb	98
10) 1,1-dichloroethene	12.95	96	239309	3.04 ppb	99
11) methylene chloride	14.33	84	594064	16.74 ppb	97
12) trans-1,2-dichloroethene	14.84	96	574437	17.35 ppb	94
13) Ethylether	12.31	74	111367	2.45 ppb	100
14) Acetone	13.32	43	148988	2.01 ppb	98
15) Carbondisulfide	13.53	76	834544	3.18 ppb	99
16) Acrolein	17.03	55	502497	12.69 ppb	100
17) Acrylonitrile	15.05	52	149795	15.56 ppb	100
18) Diisopropylether	15.74	87	570907	14.31 ppb	70
19) Methyl-tert-butyl Ether (M	14.82	73	966075	8.49 ppb #	100
20) Vinylacetate	14.04	43	137786	0.76 ppb	100
21) 1,1-dichloroethane	15.81	63	1231476	11.18 ppb	99
22) 2,2-dichloropropane	16.85	77	648188	6.82 ppb	98
23) cis-1,2-dichloroethene	16.91	96	618364	18.96 ppb #	84
24) bromochloromethane	17.35	128	366495	25.39 ppb #	82
25) 2-Butanone (MEK)	16.94	72	76454	17.14 ppb #	100
26) Tetrahydrofuran	17.39	72	62300	15.85 ppb #	1
27) chloroform	17.42	83	1189678	9.39 ppb	95
28) 1,1,1-trichloroethane	17.72	97	921958	5.98 ppb #	46
29) Allyl chloride	13.53	76	825192	3.17 ppb #	98
32) 4-Methyl-2-pentanone (MIBK	20.94	43	636936	13.92 ppb #	71
33) 2-Chloroethyl Vinyl Ether	20.48	63	226959	16.47 ppb	100
34) carbon tetrachloride	17.93	117	849685	8.09 ppb	95
35) 1,1-dichloropropene	17.97	75	813682	12.62 ppb	86
36) benzene	18.32	78	2045104	23.45 ppb	97
37) 1,2-dichloroethane	18.45	62	859853	7.67 ppb	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : L:\HPCHEM\1\DATA\L29SEP98\IC3.D
Acq On : 29 Sep 98 7:01 pm
Sample : 25 PPB
Misc :
Quant Time: Sep 30 7:25 1998

Vial: 3
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W104.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 07:22:29 1998
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38) trichloroethene	19.31	95	762938	13.50 ppb	#	72
39) 1,2-dichloropropane	19.75	63	686982	18.91 ppb		79
40) dibromomethane	19.95	93	523581	13.17 ppb		97
41) bromodichloromethane	20.13	83	1012953	10.13 ppb		97
42) cis-1,3-dichloropropene	20.78	75	931822	16.00 ppb		70
43) toluene	21.24	92	1265449	21.75 ppb		100
44) trans-1,3-dichloropropene	21.59	75	737217	13.23 ppb		86
45) 1,1,2-trichloroethane	21.89	83	514776	21.15 ppb	#	68
46) 1,2-dibromoethane	22.74	107	728071	18.11 ppb		99
47) 1,4-dichloro-2-butene	25.29	53	90202	11.16 ppb	#	9
49) tetrachloroethene	22.04	166	1206182	28.56 ppb	#	81
50) 1,3-dichloropropane	22.18	76	940990	15.28 ppb		97
51) dibromochloromethane	22.50	129	843954	14.94 ppb		96
52) chlorobenzene	23.38	112	1609047	21.32 ppb	#	82
53) 1,1,1,2-tetrachloroethane	23.47	131	693801	15.52 ppb		97
54) ethylbenzene	23.42	91	2588834	14.20 ppb		96
5) para & meta xylene	23.57	106	1852625	36.51 ppb		97
5) ortho xylene	24.19	106	941108	19.13 ppb		97
57) styrene	24.23	104	1545795	18.82 ppb		99
58) 2-Hexanone (MBK)	22.14	43	608625	12.98 ppb	#	67
59) bromoform	24.64	173	586892	16.24 ppb		96
62) Isopropyl benzene	24.69	105	2582439	13.37 ppb	#	77
63) bromobenzene	25.32	156	822144	26.14 ppb	#	1
64) 1,1,2,2-tetrachloroethane	25.20	83	874827	19.04 ppb	#	1
65) 1,2,3-trichloropropane	25.34	75	835509	11.67 ppb	#	1
66) n-propylbenzene	25.29	91	3335838	13.24 ppb		81
67) 2-chlorotoluene	25.54	91	2208939	10.64 ppb	#	87
68) 4-chlorotoluene	25.70	91	2005105	11.28 ppb	#	87
69) 1,3,5-trimethylbenzene	25.52	105	2155223	12.04 ppb	#	1
70) tert-butylbenzene	26.03	119	2301698	14.89 ppb	#	100
71) 1,2,4-trimethylbenzene	26.12	105	2167731	11.77 ppb		76
72) sec-butylbenzene	26.35	105	2818487	13.16 ppb		100
73) 1,3-dichlorobenzene	26.69	146	1338858	23.60 ppb		92
74) p-isopropyltoluene	26.53	119	2549717	14.42 ppb	#	29
75) 1,4-dichlorobenzene	26.81	146	1427479	23.23 ppb	#	1
76) 1,2-dichlorobenzene	27.41	146	1309901	23.49 ppb	#	100
77) n-butylbenzene	27.16	91	2390474	11.29 ppb	#	100
78) 1,2-dibromo-3-chloropropan	28.60	75	164942	8.00 ppb	#	1
79) 1,2,4-trichlorobenzene	29.85	180	1069637	22.00 ppb	#	100
80) hexachlorobutadiene	29.98	225	658553	8.82 ppb		99
81) naphthalene	30.33	128	2072707	23.24 ppb		100
82) 1,2,3-trichlorobenzene	30.75	180	980433	21.20 ppb		99
3) hexachloroethane	27.75	201	271227	20.20 ppb	#	100
4) 2-methylnaphthalene	32.42	142	1233203	26.58 ppb		98

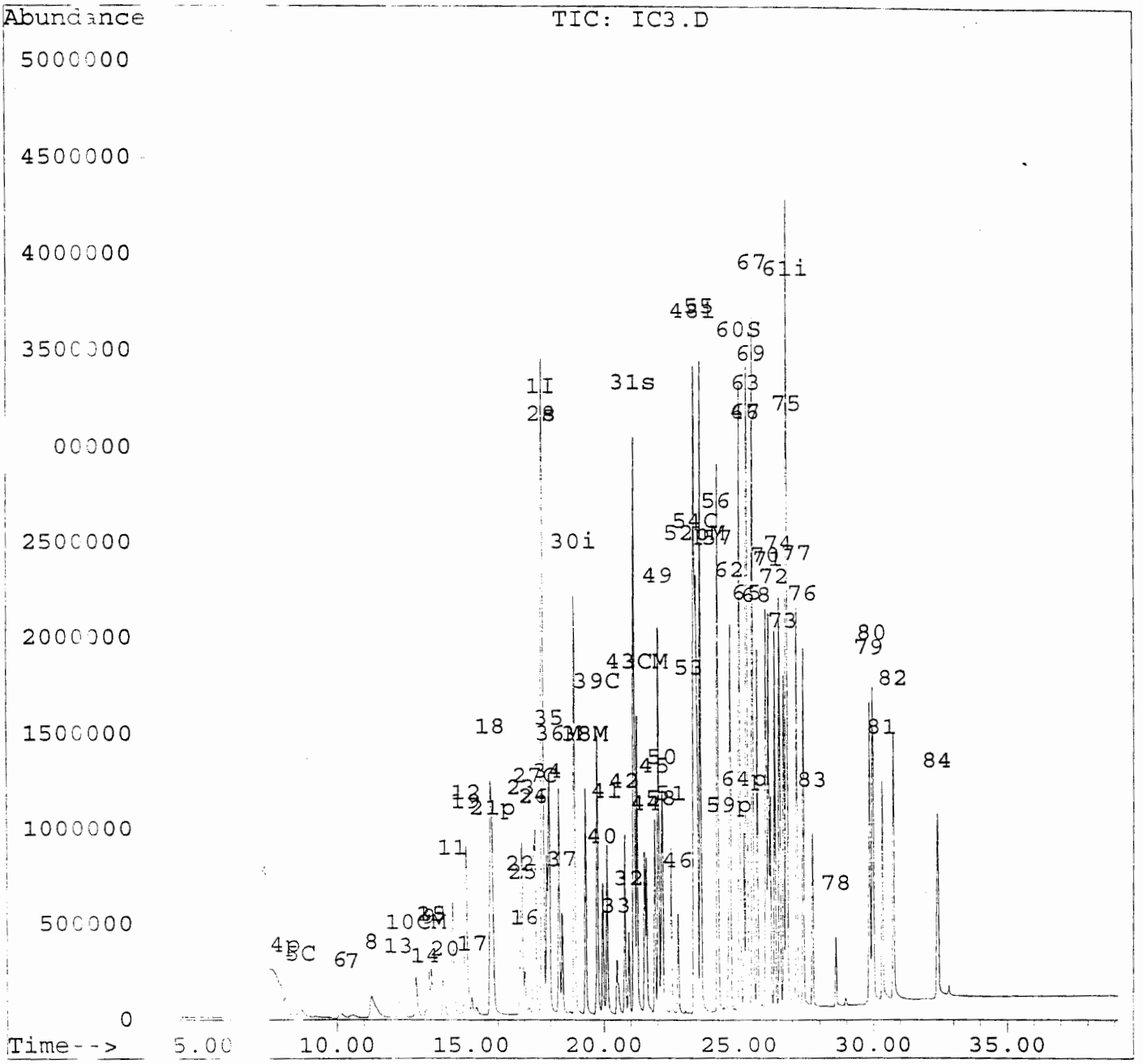
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : L:\HPCHEM\1\DATA\L29SEP98\IC3.D
Acq On : 29 Sep 98 7:01 pm
Sample : 25 PPB
Misc :
Quant Time: Sep 30 7:25 1998

Vial: 3
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W104.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 07:22:29 1998
Response via : Single Level Calibration



Quantitation Report

Data File : L:\HPCHEM\1\DATA\L29SEP98\IC4.D
Acq On : 29 Sep 98 7:49 pm
Sample : 1 PPB
Misc :
Quant Time: Sep 30 7:26 1998

Vial: 4
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W104.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 07:22:29 1998
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	17.68	168	3334637	50.00 ppb	-0.02
30) 1,4-Difluorobenzene	18.90	114	4402919	50.00 ppb	-0.02
48) Chlorobenzene-d5	23.33	117	3978246	50.00 ppb	-0.02
61) 1,4-dichlorobenzene-d4	26.77	152	2225808	50.00 ppb	-0.02
System Monitoring Compounds					**%Recovery**
2) Dibromofluoromethane	17.70	113	2114377	24.85 ppb	49.69%
31) Toluene-d8	21.13	98	4420594	40.69 ppb	81.39%
60) 4-bromofluorobenzene	25.04	95	2391908	22.85 ppb	45.69%
Target Compounds					**Qvalue**
3) dichlorodifluoromethane	7.22	85	505446	2.21 ppb	99
4) chloromethane	8.05	50	198246	2.35 ppb	99
5) vinyl chloride	8.61	62	183504	1.29 ppb	98
6) bromomethane	10.10	94	37636	0.37 ppb	92
7) chloroethane	10.59	64	36265	0.42 ppb	96
8) trichlorofluoromethane	11.28	101	288376	0.65 ppb	97
9) Methyliodide	13.42	142	378298	2.13 ppb	98
10) 1,1-dichloroethene	12.95	96	119312	1.28 ppb	99
11) methylene chloride	14.32	84	174846	4.16 ppb	99
12) trans-1,2-dichloroethene	14.84	96	282178	7.19 ppb	96
13) Ethylether	12.31	74	52539	0.97 ppb	100
14) Acetone	13.33	43	72318	0.82 ppb	97
15) Carbondisulfide	13.53	76	410380	1.32 ppb	99
16) Acrolein	17.03	55	222683	4.74 ppb	100
17) Acrylonitrile	15.05	52	72683	6.37 ppb	100
18) Diisopropylether	15.74	87	265943	5.62 ppb	65
19) Methyl-tert-butyl Ether (M	14.82	73	451955	3.35 ppb #	100
20) Vinylacetate	14.04	43	69758	0.33 ppb	100
21) 1,1-dichloroethane	15.81	63	598860	4.59 ppb	98
22) 2,2-dichloropropane	16.85	77	287881	2.56 ppb	97
23) cis-1,2-dichloroethene	16.91	96	301059	7.79 ppb #	85
24) bromochloromethane	17.35	128	171668	10.03 ppb #	71
25) 2-Butanone (MEK)	16.94	72	36331	6.87 ppb #	100
26) Tetrahydrofuran	17.38	72	30454	6.53 ppb #	1
27) chloroform	17.42	83	575585	3.83 ppb	95
28) 1,1,1-trichloroethane	17.72	97	429648	2.35 ppb #	1
29) Allyl chloride	13.53	76	405782	1.32 ppb #	98
32) 4-Methyl-1-pentanone (MIBK	20.94	43	290289	5.19 ppb #	71
33) 2-Chloroethyl Vinyl Ether	20.48	63	99595	5.91 ppb	100
34) carbon tetrachloride	17.93	117	389947	3.04 ppb	95
35) 1,1-dichloropropene	17.97	75	382471	4.85 ppb	86
36) benzene	18.32	78	967654	9.07 ppb	97
37) 1,2-dichloroethane	18.44	62	410355	2.99 ppb	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : L:\HPCHEM\1\DATA\L29SEP98\IC4.D
Acq On : 29 Sep 98 7:49 pm
Sample : 10 PPB
Misc :
Quant Time: Sep 30 7:26 1998

Vial: 4
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W104.M
Title SW-8260 Purgable Organics
Last Update Wed Sep 30 07:22:29 1998
Response via Single Level Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38) trichloroethene	19.31	95	362509	5.25 ppb	#	72
39) 1,2-dichloropropane	19.75	63	314452	7.08 ppb		79
40) dibromomethane	19.95	93	243272	5.00 ppb		96
41) bromodichloromethane	20.12	83	468566	3.83 ppb		97
42) cis-1,3-dichloropropene	20.78	75	423685	5.95 ppb		70
43) toluene	21.24	92	576300	8.10 ppb		98
44) trans-1,3-dichloropropene	21.59	75	328771	4.83 ppb		87
45) 1,1,2-trichloroethane	21.89	83	224028	7.53 ppb	#	68
46) 1,2-dibromoethane	22.72	107	315298	6.42 ppb		100
47) 1,4-dichloro-2-butene	25.29	53	37204	3.76 ppb	#	8
49) tetrachloroethene	22.02	166	554239	11.07 ppb		86
50) 1,3-dichloropropane	22.16	76	402898	5.52 ppb		97
51) dibromochloromethane	22.49	129	361325	5.40 ppb		97
52) chlorobenzene	23.38	112	716276	8.01 ppb	#	81
53) 1,1,1,2-tetrachloroethane	23.47	131	309607	5.84 ppb		97
54) ethylbenzene	23.41	91	1138855	5.27 ppb		97
55) para & meta xylene	23.57	106	828967	13.78 ppb		97
56) ortho xylene	24.19	106	425733	7.30 ppb		96
57) styrene	24.23	104	684761	7.03 ppb		100
58) 2-Hexanone (MBK)	22.14	43	266219	4.79 ppb	#	68
59) bromoform	24.62	173	244113	5.70 ppb		99
62) Isopropylbenzene	24.69	105	1156558	5.08 ppb	#	77
63) bromobenzene	25.32	156	345166	9.31 ppb	#	1
64) 1,1,2,2-tetrachloroethane	25.20	83	381215	7.04 ppb	#	1
65) 1,2,3-trichloropropane	25.32	75	356127	4.22 ppb	#	1
66) n-propylbenzene	25.29	91	1431711	4.82 ppb		80
67) 2-chlorotoluene	25.54	91	995172	4.07 ppb	#	87
68) 4-chlorotoluene	25.69	91	892400	4.26 ppb	#	87
69) 1,3,5-trimethylbenzene	25.52	105	964699	4.57 ppb	#	1
70) tert-butylbenzene	26.03	119	998022	5.48 ppb	#	100
71) 1,2,4-trimethylbenzene	26.12	105	966847	4.45 ppb		78
72) sec-butylbenzene	26.35	105	1247297	4.94 ppb		100
73) 1,3-dichlorobenzene	26.68	146	580230	8.68 ppb		92
74) p-isopropyltoluene	26.53	119	1130947	5.43 ppb	#	29
75) 1,4-dichlorobenzene	26.81	146	620713	8.57 ppb	#	1
76) 1,2-dichlorobenzene	27.41	146	571980	8.70 ppb	#	100
77) n-butylbenzene	27.14	91	1033367	4.14 ppb	#	100
78) 1,2-dibromo-3-chloropropan	28.59	75	69805	2.87 ppb	#	1
79) 1,2,4-trichlorobenzene	29.85	180	464356	8.10 ppb	#	100
80) hexachlorobutadiene	29.97	225	257226	2.92 ppb		99
81) naphthalene	30.33	128	882967	8.40 ppb		100
82) 1,2,3-trichlorobenzene	30.75	180	428879	7.87 ppb		99
83) hexachloroethane	27.75	201	102431	6.47 ppb	#	100
84) 2-methylnaphthalene	32.41	142	530586	9.70 ppb		98

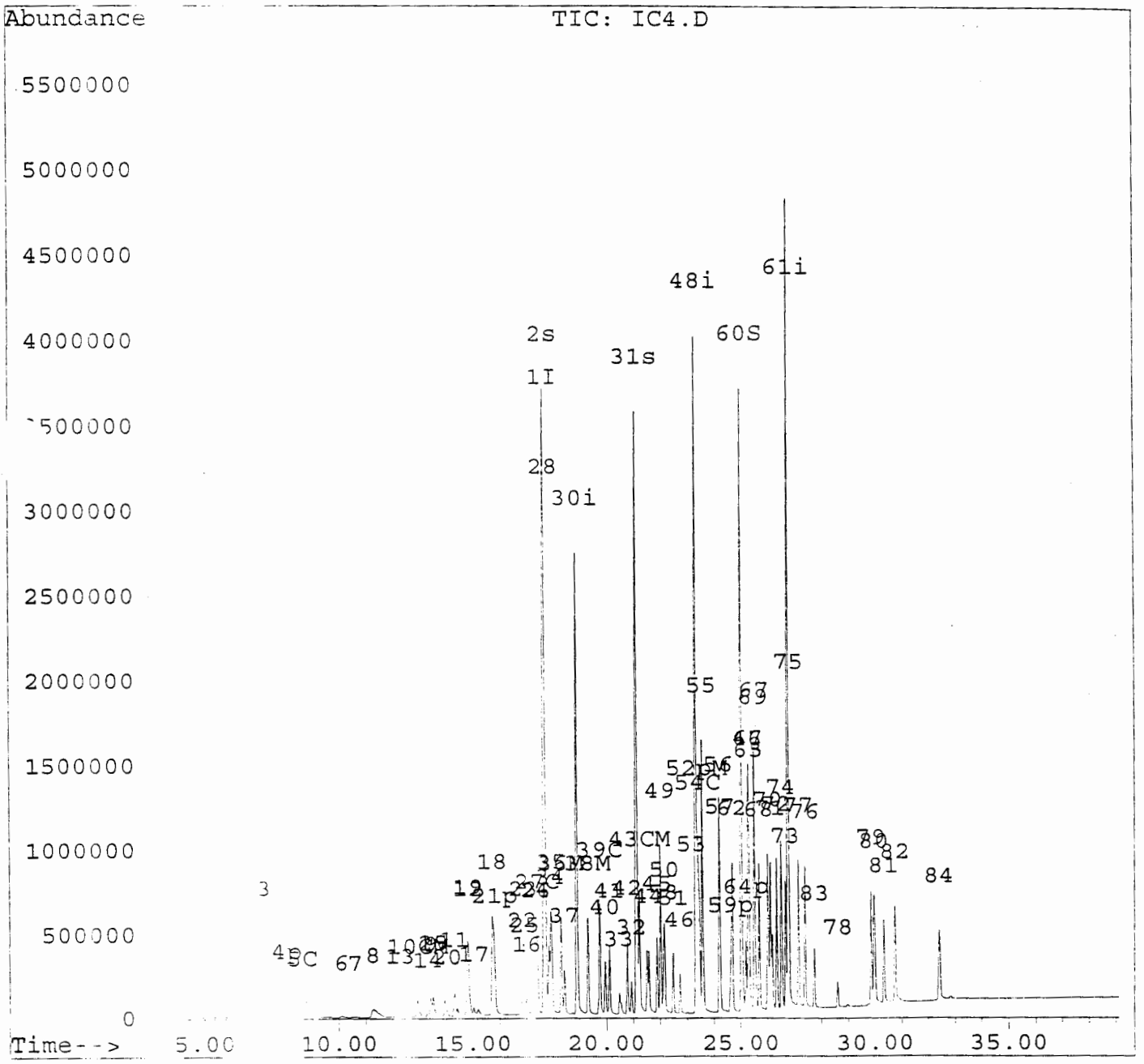
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : L:\HPCHEM\1\DATA\L29SEP98\IC4.D
Acq On : 29 Sep 98 7:49 pm
Sample : 10 PPB
Misc :
Quant Time: Sep 30 7:26 1998

Vial: 4
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W104.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 07:22:29 1998
Response via : Single Level Calibration



Quantitation Report

Data File : L \HPCHEM\1\DATA\L29SEP98\IC5.D
Acq On : 2 Sep 98 8:36 pm
Sample : 5 PPB
Misc :
Quant Time: Sep 30 7:27 1998

Vial: 5
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W104.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 07:22:29 1998
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	17.69	168	3543753	50.00 ppb	-0.02
30) 1,4-Difluorobenzene	18.91	114	4609616	50.00 ppb	-0.02
48) Chlorobenzene-d5	23.33	117	4075642	50.00 ppb	-0.02
61) 1,4-dichlorobenzene-d4	26.78	152	2194366	50.00 ppb	-0.02
System Monitoring Compounds					%Recovery
2) Dibromofluoromethane	17.70	113	2181099	24.12 ppb	48.24%
31) Toluene-d8	21.12	98	4557278	40.07 ppb	80.14%
60) 4-bromofluorobenzene	25.02	95	2462628	22.96 ppb	45.92%
Target Compounds					Qvalue
3) dichlorodifluoromethane	7.20	85	256580	1.05 ppb	98
4) chloromethane	8.05	50	89593	1.00 ppb	97
5) vinyl chloride	8.60	62	88153	0.58 ppb	99
6) bromomethane	10.08	94	23646	0.22 ppb	93
7) chloroethane	10.54	64	20868	0.23 ppb	87
8) trichlorofluoromethane	11.28	101	148036	0.32 ppb	99
9) Methyliodide	13.42	142	184965	0.98 ppb	98
10) 1,1-dichloroethene	12.95	96	59607	0.60 ppb	93
11) methylene chloride	14.33	84	93527	2.09 ppb	98
12) trans-1,2-dichloroethene	14.82	96	133996	3.21 ppb	91
13) Ethylether	12.29	74	27270	0.48 ppb	100
14) Acetone	13.32	43	39481	0.42 ppb	95
15) Carbondisulfide	13.51	76	199644	0.60 ppb	99
16) Acrolein	17.03	55	108897	2.18 ppb	100
17) Acrylonitrile	15.03	52	35241	2.90 ppb	100
18) Diisopropyl ether	15.74	87	127940	2.55 ppb #	63
19) Methyl-tert-butyl Ether (M	14.80	73	212335	1.48 ppb #	100
21) 1,1-dichloroethane	15.79	63	290490	2.09 ppb	98
22) 2,2-dichloropropane	16.85	77	135971	1.14 ppb	97
23) cis-1,2-dichloroethene	16.91	96	142051	3.46 ppb #	87
24) bromochloromethane	17.35	128	82629	4.54 ppb #	83
25) 2-Butanone (MEK)	16.94	72	17730	3.15 ppb #	100
26) Tetrahydrofuran	17.39	72	15392	3.11 ppb #	1
27) chloroform	17.42	83	280130	1.75 ppb	96
28) 1,1,1-trichloroethane	17.70	97	212972	1.10 ppb #	1
29) Allyl chloride	13.51	76	197628	0.60 ppb #	98
32) 4-Methyl-2-pentanone (MIBK	20.94	43	137275	2.34 ppb #	72
33) 2-Chloroethyl Vinyl Ether	20.48	63	45785	2.60 ppb	100
34) carbon tetrachloride	17.93	117	187139	1.39 ppb	94
35) 1,1-dichloropropene	17.97	75	192057	2.33 ppb	87
36) benzene	18.32	78	476956	4.27 ppb	96
37) 1,2-dichloroethane	18.45	62	198547	1.38 ppb	92
38) trichloroethene	19.31	95	178408	2.47 ppb #	71

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : L:\HPCHEM\1\DATA\L29SEP98\IC5.D
Acq On : 29 Sep 98 8:36 pm
Sample : 5 PPB
Misc :
Quant Time: Sep 30 7:27 1998

Vial: 5
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W104.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 07:22:29 1998
Response via : Single Level Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
39) 1,2-dichloropropane	19.75	63	156025	3.36 ppb		78
40) dibromomethane	19.95	93	116628	2.29 ppb		93
41) bromodichloromethane	20.13	83	223318	1.75 ppb		97
42) cis-1,3-dichloropropene	20.78	75	197738	2.65 ppb		71
43) toluene	21.22	92	289184	3.88 ppb		97
44) trans-1,3-dichloropropene	21.59	75	154459	2.17 ppb		87
45) 1,1,2-trichloroethane	21.89	83	112280	3.60 ppb	#	68
46) 1,2-Dibromoethane	22.73	107	151970	2.95 ppb		99
47) 1,4-dichloro-2-butene	25.29	53	17453	1.69 ppb	#	7
49) tetrachloroethene	22.02	166	281342	5.49 ppb	#	85
50) 1,3-dichloropropane	22.16	76	200317	2.68 ppb		96
51) dibromochloromethane	22.48	129	171676	2.50 ppb		97
52) chlorobenzene	23.36	112	352027	3.84 ppb	#	77
53) 1,1,1,2-tetrachloroethane	23.47	131	144238	2.66 ppb		96
54) ethylbenzene	23.42	91	569297	2.57 ppb		97
55) para & meta xylene	23.57	106	403003	6.54 ppb		99
56) ortho xylene	24.19	106	199178	3.33 ppb		96
57) styrene	24.21	104	325292	3.26 ppb		91
58) 2-Hexanone (MBK)	22.12	43	121914	2.14 ppb	#	67
59) bromoform	24.62	173	111441	2.54 ppb		98
62) Isopropylbenzene	24.67	105	550847	2.45 ppb	#	76
63) bromobenzene	25.33	156	165274	4.52 ppb	#	1
64) 1,1,2,2-tetrachloroethane	25.20	83	183562	3.44 ppb	#	1
65) 1,2,3-trichloropropane	25.33	75	172099	2.07 ppb	#	1
66) n-propylbenzene	25.29	91	708744	2.42 ppb		80
67) 2-chlorotoluene	25.54	91	478432	1.98 ppb	#	87
68) 4-chlorotoluene	25.70	91	427200	2.07 ppb	#	86
69) 1,3,5-trimethylbenzene	25.52	105	453016	2.18 ppb	#	1
70) tert-butylbenzene	26.03	119	464542	2.59 ppb	#	100
71) 1,2,4-trimethylbenzene	26.10	105	459507	2.15 ppb		82
72) sec-butylbenzene	26.35	105	588258	2.36 ppb		100
73) 1,3-dichlorobenzene	26.67	146	274734	4.17 ppb		95
74) p-isopropyltoluene	26.53	119	523965	2.55 ppb	#	29
75) 1,4-dichlorobenzene	26.81	146	301301	4.22 ppb	#	1
76) 1,2-dichlorobenzene	27.41	146	267572	4.13 ppb	#	100
77) n-butylbenzene	27.15	91	480678	1.95 ppb	#	100
78) 1,2-dibromo-3-chloropropan	28.60	75	32565	1.36 ppb	#	1
79) 1,2,4-trichlorobenzene	29.85	180	216241	3.83 ppb	#	100
80) hexachlorobutadiene	29.98	225	121406	1.40 ppb		98
81) naphthalene	30.33	128	400233	3.86 ppb		100
82) 1,2,3-trichlorobenzene	30.74	180	194306	3.62 ppb		100
83) hexachloroethane	27.75	201	40508	2.60 ppb	#	100
84) 2-methylnaphthalene	32.42	142	240324	4.46 ppb		99

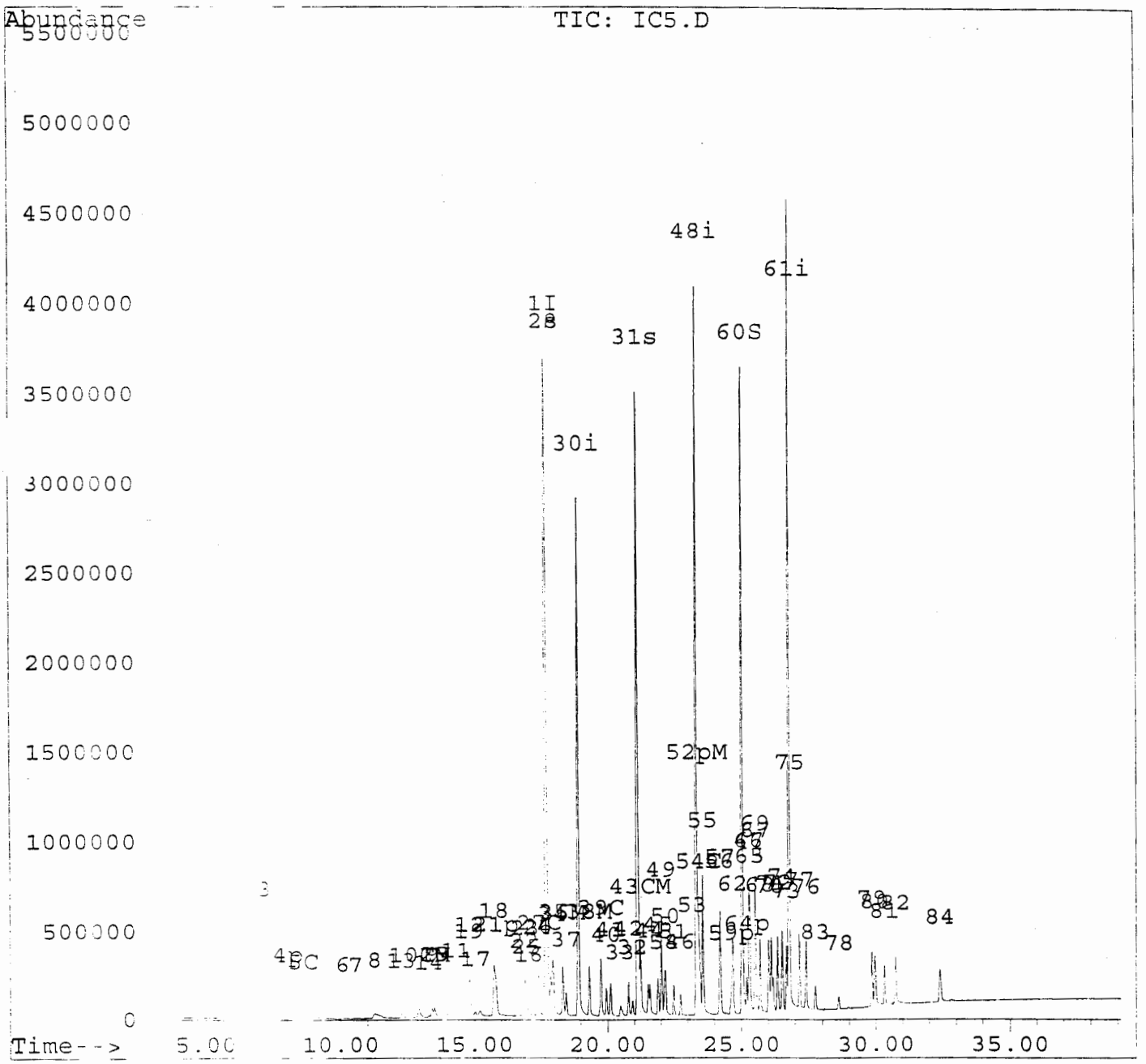
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : L:\HPCHEM\1\DATA\L29SEP98\IC5.D
Acq On : 29 Sep 98 8:36 pm
Sample : 5 PPB
Misc :
Quant Time: Sep 30 7:27 1998

Vial: 5
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W104.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 07:22:29 1998
Response via : Single Level Calibration



Quantitation Report

Data File : L:\HPCHEM\1\DATA\L29SEP98\IC6.D
Acq On : 29 Sep 98 9:23 pm
Sample : 1 PPB
Misc :
Quant Time: Sep 30 7:28 1998

Vial: 6
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W104.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 07:22:29 1998
Response via : Single Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	17.68	168	3283602	50.00 ppb		-0.02
30) 1,4-Difluorobenzene	18.90	114	4262957	50.00 ppb		-0.02
48) Chlorobenzene-d5	23.32	117	3789363	50.00 ppb		-0.02
61) 1,4-dichlorobenzene-d4	26.75	152	1972876	50.00 ppb		-0.04
System Monitoring Compounds						**%Recovery**
2) Dibromofluoromethane	17.70	113	2018689	24.09 ppb		48.18%
31) Toluene-d8	21.13	98	4300909	40.89 ppb		81.78%
60) 4-bromofluorobenzene	25.02	95	2248545	22.55 ppb		45.10%
Target Compounds						**Qvalue**
3) dichlorodifluoromethane	7.20	85	49854	0.22 ppb		96
4) chloromethane	8.06	50	29263	0.35 ppb		97
9) Methyliodide	13.42	142	36872	0.21 ppb		97
11) methylene chloride	14.32	84	28584	0.69 ppb		96
12) trans-1,2-dichloroethene	14.82	96	29246	0.76 ppb	#	89
6) Acrolein	17.03	55	22994	0.50 ppb		100
7) Acrylonitrile	15.03	52	7353	0.65 ppb		100
18) Diisopropylether	15.74	87	25402	0.55 ppb		67
19) Methyl-tert-butyl Ether (M	14.80	73	41122	0.31 ppb	#	100
21) 1,1-dichloroethane	15.79	63	58717	0.46 ppb		97
22) 2,2-dichloropropane	16.85	77	25654	0.23 ppb		94
23) cis-1,2-dichloroethene	16.91	96	28202	0.74 ppb	#	83
24) bromochloromethane	17.33	128	16893	1.00 ppb	#	73
25) 2-Butanone (MEK)	16.94	72	3807	0.73 ppb	#	100
26) Tetrahydrofuran	17.38	72	3263	0.71 ppb	#	1
27) chloroform	17.42	83	55780	0.38 ppb		95
28) 1,1,1-trichloroethane	17.72	97	44016	0.24 ppb	#	1
32) 4-Methyl-2-pentanone (MIBK	20.94	43	30334	0.56 ppb	#	71
33) 2-Chloroethyl Vinyl Ether	20.48	63	10222	0.63 ppb		100
34) carbon tetrachloride	17.93	117	37031	0.30 ppb		95
35) 1,1-dichloropropene	17.97	75	40691	0.53 ppb		85
36) benzene	18.32	78	97064	0.94 ppb		98
37) 1,2-dichloroethane	18.44	62	40603	0.31 ppb		92
38) trichloroethene	19.31	95	41216	0.62 ppb	#	74
39) 1,2-dichloropropane	19.75	63	32701	0.76 ppb		80
40) dibromomethane	19.95	93	24652	0.52 ppb		97
41) bromodichloromethane	20.12	83	43520	0.37 ppb		98
42) cis-1,3-dichloropropene	20.78	75	39402	0.57 ppb		70
43) toluene	21.22	92	66633	0.97 ppb		99
44) trans-1,3-dichloropropene	21.59	75	30389	0.46 ppb		90
45) 1,1,2-trichloroethane	21.89	83	24271	0.84 ppb	#	68
6) 1,2-Dibromoethane	22.72	107	31485	0.66 ppb		100
7) 1,4-dichloro-2-butene	25.27	53	3137	0.33 ppb	#	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : L:\HPCHEM\1\DATA\L29SEP98\IC6.D
Acq On : 29 Sep 98 9:23 pm
Sample : 1 PPB
Misc :
Quant Time: Sep 30 7:28 1998

Vial: 6
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W104.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 07:22:29 1998
Response via : Single Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
49)	tetrachloroethene	22.02	166	68335	1.43 ppb	#	85
50)	1,3-dichloropropane	22.16	76	42658	0.61 ppb		94
51)	dibromochloromethane	22.48	129	32555	0.51 ppb		98
52)	chlorobenzene	23.36	112	79110	0.93 ppb	#	75
53)	1,1,1,2-tetrachloroethane	23.45	131	27465	0.54 ppb	#	80
54)	ethylbenzene	23.41	91	133617	0.65 ppb		98
55)	para & meta xylene	23.57	106	90096	1.57 ppb		96
56)	ortho xylene	24.19	106	42623	0.77 ppb		97
57)	styrene	24.21	104	66968	0.72 ppb		95
58)	2-Hexanone (MBK)	22.12	43	24768	0.47 ppb	#	66
59)	bromoform	24.61	173	20391	0.50 ppb		97
62)	Isopropyl benzene	24.67	105	119116	0.59 ppb	#	76
63)	bromobenzene	25.30	156	37495	1.14 ppb	#	1
64)	1,1,2,2-tetrachloroethane	25.18	83	37149	0.77 ppb	#	1
65)	1,2,3-trichloropropane	25.32	75	38544	0.52 ppb	#	1
66)	n-propylbenzene	25.27	91	157533	0.60 ppb		79
7)	2-chlorotoluene	25.52	91	102580	0.47 ppb	#	88
8)	4-chlorotoluene	25.68	91	94268	0.51 ppb	#	87
69)	1,3,5-trimethylbenzene	25.50	105	97921	0.52 ppb	#	1
70)	tert-butylbenzene	26.01	119	99506	0.62 ppb	#	100
71)	1,2,4-trimethylbenzene	26.10	105	100447	0.52 ppb		80
72)	sec-butylbenzene	26.33	105	131002	0.59 ppb		100
73)	1,3-dichlorobenzene	26.67	146	62643	1.06 ppb		93
74)	p-isopropyltoluene	26.51	119	110806	0.60 ppb	#	29
75)	1,4-dichlorobenzene	26.79	146	69691	1.09 ppb	#	1
76)	1,2-dichlorobenzene	27.39	146	59175	1.02 ppb	#	100
77)	n-butylbenzene	27.14	91	107261	0.48 ppb	#	100
79)	1,2,4-trichlorobenzene	29.83	180	49961	0.98 ppb	#	100
80)	hexachlorobutadiene	29.96	225	32891	0.42 ppb		100
81)	naphthalene	30.31	128	96918	1.04 ppb		100
82)	1,2,3-trichlorobenzene	30.72	180	47083	0.97 ppb		100
83)	hexachloroethane	27.73	201	5433	0.39 ppb	#	100
84)	2-methylnapthalene	32.38	142	71381	1.47 ppb		92

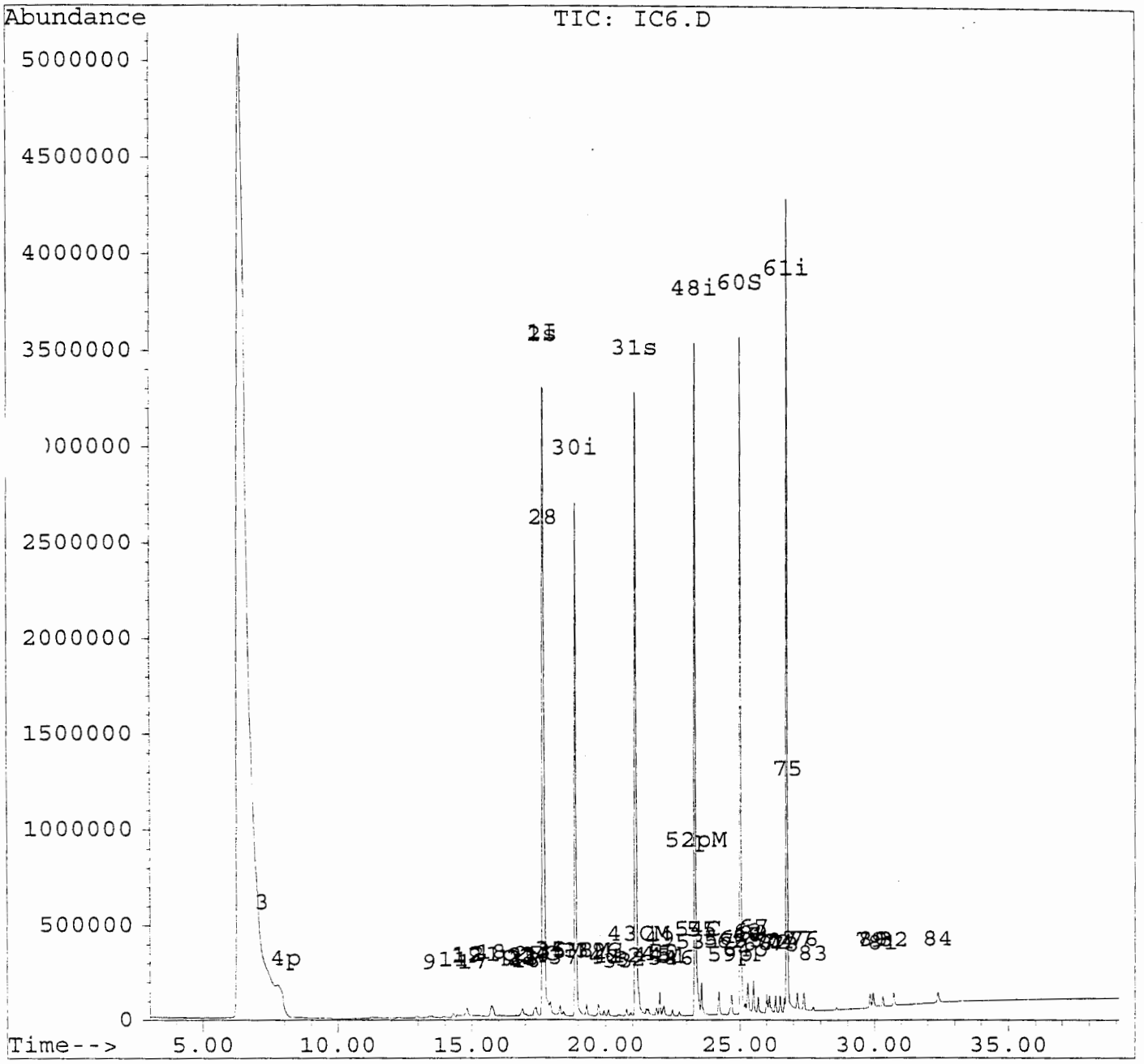
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : L:\HPCHEM\1\DATA\L29SEP98\IC6.D
Acq On : 29 Sep 98 9:23 pm
Sample : 1 PPB
Misc :
Quant Time: Sep 30 7:28 1998

Vial: 6
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W104.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 07:22:29 1998
Response via : Single Level Calibration



Response Factor Report 5972-INST

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Initial Calibration

Calibration Files

1	=IC1.D	5	=IC2.D	10	=IC3.D
25	=IC4.D	50	=IC5.D	100	=IC6.D

		Compound	1	5	10	25	50	100	Avg	%RSD
1)	I	Pentafluorobenzene	----------ISTD----------							
2)	s	Dibromofluoromethan	0.588	0.586	0.603	0.609	0.603	0.596	0.598	1.55
3)		dichlorodifluoromet	0.852	0.499	0.522	0.674	0.627	0.674	0.641	19.86
4)	p	chloromethane	6.663	0.647	0.697	0.844	0.829	0.870	1.759	136.71#
5)	C	vinyl chloride	0.947	0.631	0.668	0.806	0.812	0.889	0.792	15.48
6)		bromomethane	1.292	0.429	0.355	0.458	0.453	0.210	0.533	71.98
7)		chloroethane	0.486	0.410	0.413	0.434	0.429	0.479	0.442	7.43
8)		trichlorofluorometh	0.858	0.749	0.764	0.848	0.769	0.847	0.806	6.23
9)		Methyliodide	0.805	0.730	0.698	0.785	0.692	0.754	0.744	6.16
10)	CM	1,1-dichloroethene	0.419	0.410	0.424	0.465	0.418	0.440	0.429	4.69
11)		methylene chloride	1.885	0.514	0.591	0.596	0.503	0.531	0.770	71.06
12)		trans-1,2-dichloroe	0.472	0.477	0.478	0.520	0.467	0.499	0.486	4.17
13)		Ethylether	0.298	0.266	0.280	0.305	0.276	0.309	0.289	6.04
14)		Acetone	0.414	0.179	0.207	0.227	0.186	0.159	0.229	41.01
15)		Carbondisulfide	1.757	1.656	1.710	1.885	1.699	1.810	1.753	4.76
16)		Acrolein	0.377	0.340	0.411	0.450	0.405	0.452	0.406	10.59
		Acrylonitrile	0.152	0.119	0.133	0.145	0.127	0.137	0.136	8.79
		Diisopropylether	0.364	0.458	0.521	0.592	0.531	0.582	0.508	16.77
19)		Methyl-tert-butyl E	0.893	0.990	1.100	1.261	1.131	1.237	1.102	12.84
20)		Vinylacetate	1.119	1.300	1.355	1.503	1.327	1.440	1.341	9.87
21)	p	1,1-dichloroethane	0.985	1.036	1.093	1.202	1.060	1.144	1.087	7.16
22)		2,2-dichloropropane	0.621	0.656	0.683	0.735	0.648	0.684	0.671	5.87
23)		cis-1,2-dichloroeth	0.445	0.475	0.502	0.558	0.500	0.540	0.503	8.26
24)		bromochloromethane	0.213	0.237	0.241	0.270	0.237	0.258	0.243	8.03
25)		2-Butanone (MEK)	0.079	0.044	0.052	0.059	0.051	0.050	0.056	22.15
26)		Tetrahydrofuran	0.047	0.043	0.045	0.053	0.049	0.054	0.048	9.07
27)	C	chloroform	0.753	0.810	0.861	0.933	0.829	0.904	0.849	7.70
28)		1,1,1-trichloroetha	0.610	0.654	0.696	0.754	0.678	0.714	0.684	7.27
29)		Allyl chloride	1.757	1.656	1.710	1.885	1.699	1.810	1.753	4.76
30)	i	1,4-Difluorobenzene	----------ISTD----------							
31)	s	Toluene-d8	1.032	1.049	1.049	1.065	1.105	1.118	1.070	3.19
32)		4-Methyl-2-pentanon	0.261	0.246	0.278	0.337	0.309	0.337	0.295	13.18
33)		2-Chloroethyl Vinyl	0.083	0.124	0.150	0.170	0.176	0.208	0.152	28.84
34)		carbon tetrachlorid	0.276	0.310	0.332	0.376	0.346	0.371	0.335	11.37
35)		1,1-dichloropropene	0.388	0.390	0.416	0.457	0.421	0.455	0.421	7.20
36)	M	benzene	1.282	1.195	1.256	1.361	1.245	1.360	1.283	5.16
37)		1,2-dichloroethane	0.327	0.357	0.372	0.412	0.363	0.384	0.369	7.67
38)	M	trichloroethene	0.341	0.349	0.364	0.396	0.354	0.382	0.364	5.83
39)	C	1,2-dichloropropane	0.365	0.377	0.406	0.443	0.401	0.433	0.404	7.52
40)		dibromomethane	0.194	0.195	0.205	0.224	0.202	0.217	0.206	5.85
41)		bromodichloromethan	0.358	0.373	0.403	0.451	0.412	0.448	0.407	9.32
		cis-1,3-dichloropro	0.344	0.420	0.470	0.539	0.505	0.560	0.473	16.99

(#) = Out of Range

Response Factor Report 5972-INST

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Initial Calibration

Calibration Files
1 =IC1.D 5 =IC2.D 10 =IC3.D
25 =IC4.D 50 =IC5.D 100 =IC6.D

		Compound	1	5	10	25	50	100	Avg	%RSD
43)	CM	toluene	0.639	0.664	0.690	0.770	0.728	0.786	0.713	8.20
44)		trans-1,3-dichlorop	0.285	0.345	0.386	0.437	0.423	0.457	0.389	16.67
45)		1,1,2-trichloroetha	0.209	0.223	0.238	0.269	0.252	0.262	0.242	9.57
46)		1,2-Dibromoethane	0.218	0.237	0.259	0.309	0.297	0.313	0.272	14.71
47)		1,4-dichloro-2-bute	0.038	0.031	0.041	0.052	0.056	0.065	0.047	26.64
48)	i	Chlorobenzene-d5	----------ISTD----------							
49)		tetrachloroethene	0.537	0.578	0.573	0.591	0.527	0.604	0.568	5.35
50)		1,3-dichloropropane	0.464	0.495	0.535	0.581	0.516	0.573	0.527	8.52
51)		dibromochloromethan	0.254	0.288	0.317	0.352	0.319	0.349	0.313	11.96
52)	pM	chlorobenzene	0.812	0.823	0.865	0.941	0.844	0.919	0.867	6.04
53)		1,1,1,2-tetrachloro	0.281	0.284	0.307	0.341	0.308	0.344	0.311	8.75
54)	C	ethylbenzene	1.176	1.314	1.445	1.608	1.512	1.685	1.457	12.94
55)		para & meta xylene	0.408	0.512	0.560	0.630	0.575	0.637	0.554	15.40
56)		ortho xylene	0.384	0.509	0.573	0.645	0.576	0.639	0.554	17.58
57)		styrene	0.537	0.759	0.880	1.036	0.946	1.067	0.871	22.70
58)		2-Hexanone (MBK)	0.273	0.246	0.280	0.328	0.304	0.319	0.292	10.70
	p	bromoform	0.152	0.152	0.183	0.212	0.194	0.209	0.184	14.53
	S	4-bromofluorobenzen	0.453	0.500	0.528	0.537	0.534	0.528	0.513	6.27
61)	i	1,4-dichlorobenzene-d	----------ISTD----------							
62)		Isopropyl benzene	2.363	2.773	2.868	3.155	2.789	2.663	2.769	9.36
63)		bromobenzene	0.764	0.696	0.712	0.774	0.676	0.648	0.712	6.94
64)	p	1,1,2,2-tetrachloro	0.994	0.730	0.781	0.855	0.719	0.633	0.785	16.04
65)		1,2,3-trichloroprop	1.097	0.744	0.785	0.902	0.755	0.722	0.834	17.21
66)		n-propylbenzene	3.531	3.698	3.784	4.187	3.755	3.667	3.770	5.90
67)		2-chlorotoluene	2.248	2.330	2.397	2.635	2.333	2.399	2.390	5.52
68)		4-chlorotoluene	1.736	1.903	1.988	2.234	1.990	2.002	1.975	8.18
69)		1,3,5-trimethylbenz	1.982	2.272	2.359	2.634	2.337	2.406	2.332	9.07
70)		tert-butylbenzene	1.886	2.311	2.401	2.626	2.307	2.632	2.360	11.62
71)		1,2,4-trimethylbenz	1.746	2.265	2.331	2.687	2.401	2.534	2.327	13.85
72)		sec-butylbenzene	2.669	3.202	3.334	3.813	3.336	3.558	3.319	11.58
73)		1,3-dichlorobenzene	1.324	1.241	1.260	1.424	1.304	1.413	1.328	5.77
74)		p-isopropyltoluene	1.912	2.620	2.757	3.190	2.883	3.170	2.755	17.08
75)		1,4-dichlorobenzene	1.424	1.265	1.315	1.439	1.334	1.482	1.376	6.10
76)		1,2-dichlorobenzene	1.304	1.260	1.314	1.482	1.365	1.502	1.371	7.26
77)		n-butylbenzene	1.397	2.513	2.628	3.121	2.926	3.481	2.678	26.79
78)		1,2-dibromo-3-chlor	0.123	0.110	0.109	0.130	0.125	0.134	0.122	8.53
79)		1,2,4-trichlorobenz	0.088	0.007	0.225	0.620	0.744	0.948	0.439	87.68
80)		hexachlorobutadiene	0.134	0.456	0.489	0.564	0.477	0.550	0.445	35.49
81)		naphthalene	0.544	0.042	0.172	1.080	1.453	1.941	0.872	85.99
82)		1,2,3-trichlorobenz	0.107	0.008	0.013	0.332	0.532	0.742	0.289	104.31
83)		hexachloroethane	0.130	0.153	0.189	0.246	0.264	0.331	0.219	34.52
		2-methylnapthalene	0.007	0.009	0.013	0.023	0.033	0.047	0.022	70.14

(#) = Out of Range

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H30SEP98\IC1.D
Acq On : 30 Sep 98 4:01 pm
Sample : 1 ppb
Misc :
Quant Time: Sep 30 16:42 1998

Vial: 1
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38.M
Title : SW-8260 Purgable Organics
Last Update : Tue Sep 29 09:39:04 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	20.51	168	1287049	50.00 ppb	0.03
30) 1,4-Difluorobenzene	22.01	114	2009825	50.00 ppb	0.03
48) Chlorobenzene-d5	27.61	117	1787610	50.00 ppb	0.03
61) 1,4-dichlorobenzene-d4	32.14	152	686433	50.00 ppb	0.03
System Monitoring Compounds					%Recovery
2) Dibromofluoromethane	20.56	113	757070	50.47 ppb	100.94%
31) Toluene-d8	24.83	98	2075137	47.55 ppb	95.09%
60) 4-bromofluorobenzene	29.82	95	810130	43.68 ppb	87.36%
Target Compounds					Qvalue
3) dichlorodifluoromethane	9.68	85	21925	1.00 ppb	94
4) chloromethane	10.64	50	171506	7.61 ppb	97
5) vinyl chloride	11.18	62	24379	1.16 ppb	97
6) bromomethane	12.68	94	33248	4.91 ppb	96
7) chloroethane	13.04	64	12503	1.11 ppb	100
8) trichlorofluoromethane	13.98	101	22079	1.03 ppb	90
9) Methyliodide	16.04	142	20728	1.43 ppb #	89
10) 1,1-dichloroethene	15.57	96	10794	0.97 ppb #	80
11) methylene chloride	16.82	84	48509	3.24 ppb	98
12) trans-1,2-dichloroethene	17.50	96	12161	0.97 ppb #	87
13) Ethylether	14.89	74	7674	0.87 ppb	100
14) Acetone	15.73	43	10652	1.39 ppb	99
15) Carbondisulfide	16.26	76	45220	1.00 ppb	97
16) Acrolein	19.80	55	9714	0.69 ppb	100
17) Acrylonitrile	17.38	52	3908	0.81 ppb	100
18) Diisopropylether	18.48	87	9378	0.71 ppb #	62
19) Methyl-tert-butyl Ether (M	17.48	73	22997	0.67 ppb	100
20) Vinylacetate	18.48	43	28803	0.85 ppb	100
21) 1,1-dichloroethane	18.42	63	25352	0.94 ppb	95
22) 2,2-dichloropropane	19.68	77	15973	0.94 ppb	99
23) cis-1,2-dichloroethene	19.64	96	11444	0.88 ppb	97
24) bromochloromethane	20.14	128	5494	0.82 ppb #	83
25) 2-Butanone (MEK)	19.62	72	2041	1.02 ppb #	15
26) Tetrahydrofuran	20.26	72	778	0.40 ppb #	37
27) chloroform	20.24	83	19380	0.88 ppb	88
28) 1,1,1-trichloroethane	20.70	97	15691	0.90 ppb #	69
29) Allyl chloride	16.26	76	45220	1.00 ppb #	98
32) 4-Methyl-2-pentanone (MIBK	24.47	43	10496	0.62 ppb #	87
33) 2-Chloroethyl Vinyl Ether	23.91	63	3339	0.45 ppb	100
34) carbon tetrachloride	21.04	117	11078	0.76 ppb	97
35) 1,1-dichloropropene	21.00	75	15604	0.94 ppb	96
36) benzene	21.42	78	51537	1.02 ppb	95
37) 1,2-dichloroethane	21.41	62	13149	0.80 ppb	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H30SEP98\IC1.D
Acq On : 30 Sep 98 4:01 pm
Sample : 1 ppb
Misc :
Quant Time: Sep 30 16:42 1998

Vial: 1
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38.M
Title : SW-8260 Purgable Organics
Last Update : Tue Sep 29 09:39:04 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	trichloroethene	22.59	95	13702	0.91 ppb		90
39)	1,2-dichloropropane	23.03	63	14662	0.92 ppbL		98
40)	dibromomethane	23.29	93	7808	0.84 ppb	#	67
41)	bromodichloromethane	23.48	83	14391	0.83 ppb		96
42)	cis-1,3-dichloropropene	24.30	75	13831	0.69 ppb		91
43)	toluene	24.97	92	25684	0.87 ppb		89
44)	trans-1,3-dichloropropene	25.27	75	11443	0.66 ppb		83
45)	1,1,2-trichloroethane	25.65	83	8402	0.76 ppb		95
46)	1,2-Dibromoethane	26.77	107	8758	0.65 ppb	#	98
47)	1,4-dichloro-2-butene	30.06	53	1533	0.59 ppb	#	1
49)	tetrachloroethene	26.04	166	19186	0.93 ppb	#	80
50)	1,3-dichloropropane	26.00	76	16601	0.78 ppb		98
51)	dibromochloromethane	26.48	129	9067	0.73 ppb		93
52)	chlorobenzene	27.67	112	29015	0.93 ppb		86
53)	1,1,1,2-tetrachloroethane	27.76	131	10047	0.87 ppb	#	42
54)	ethylbenzene	27.79	91	35434	0.68 ppb		94
5)	para & meta xylene	27.98	106	29141	1.49 ppb	#	73
6)	ortho xylene	28.79	106	13712	0.71 ppb	#	74
57)	styrene	28.80	104	19199	0.61 ppb		91
58)	2-Hexanone (MBK)	26.00	43	9755	0.76 ppb	#	42
59)	bromoform	29.27	173	5427	0.69 ppb		88
62)	Isopropyl benzene	29.45	105	32440	0.89 ppb		92
63)	bromobenzene	30.21	156	10489	1.04 ppb	#	83
64)	1,1,2,2-tetrachloroethane	29.97	83	13649	1.01 ppb		93
65)	1,2,3-trichloropropane	30.14	75	15063	1.05 ppb		89
66)	n-propylbenzene	30.26	91	45051	0.96 ppb		97
67)	2-chlorotoluene	30.53	91	30868	0.96 ppb		93
68)	4-chlorotoluene	30.73	91	23829	0.88 ppb		87
69)	1,3,5-trimethylbenzene	30.56	105	27213	0.88 ppb		90
70)	tert-butylbenzene	31.24	119	25895	0.82 ppb		92
71)	1,2,4-trimethylbenzene	31.33	105	23971	0.76 ppb		100
72)	sec-butylbenzene	31.68	105	36642	0.84 ppb		96
73)	1,3-dichlorobenzene	32.03	146	18182	0.98 ppb		97
74)	p-isopropyltoluene	31.92	119	26244	0.71 ppb		98
75)	1,4-dichlorobenzene	32.18	146	19545	1.01 ppb		96
76)	1,2-dichlorobenzene	32.97	146	17900	0.93 ppb		98
77)	n-butylbenzene	32.76	91	19181	0.54 ppb		91
78)	1,2-dibromo-3-chloropropan	34.51	75	1686	0.75 ppb	#	38
81)	naphthalene	37.15	128	7471	0.43 ppb		100
82)	1,2,3-trichlorobenzene	37.77	180	1463	0.27 ppb		88
83)	hexachloroethane	33.50	201	1778	0.56 ug/l	#	100
84)	2-methylnapthalene	40.44	142	95	0.31 ug/l	#	100

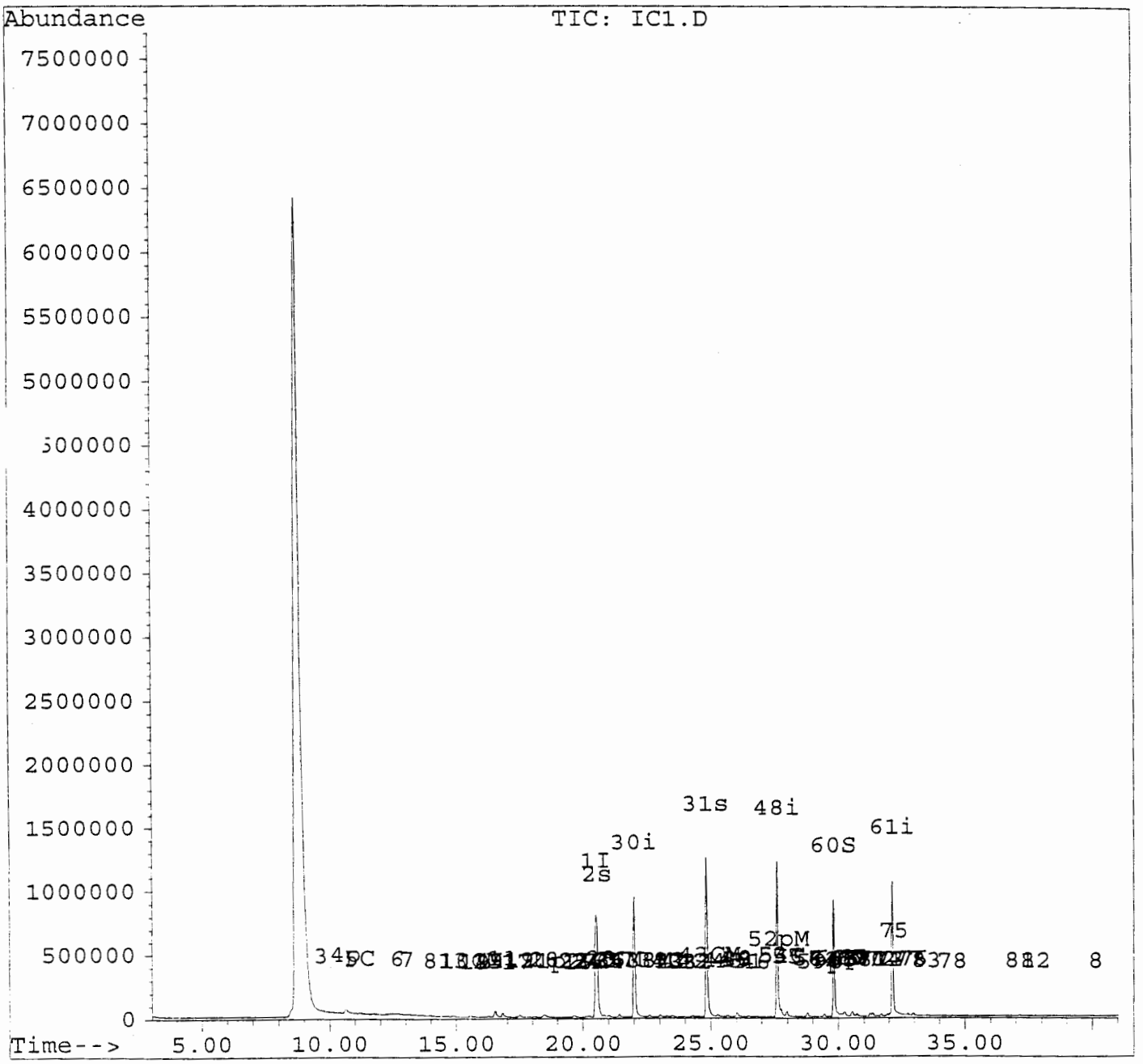
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H30SEP98\IC1.D
Acq On : 30 Sep 98 4:01 pm
Sample : 1 ppb
Misc :
Quant Time: Sep 30 16:42 1998

Vial: 1
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38.M
Title : SW-8260 Purgable Organics
Last Update : Tue Sep 29 09:39:04 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\H30SEP98\IC2.D
Acq On : 30 Sep 98 4:52 pm
Sample : 5 ppb
Misc :
Quant Time: Sep 30 17:33 1998

Vial: 2
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38.M
Title : SW-8260 Purgable Organics
Last Update : Tue Sep 29 09:39:04 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	20.51	168	1495327	50.00	ppb		0.03
30) 1,4-Difluorobenzene	22.01	114	2356934	50.00	ppb		0.03
48) Chlorobenzene-d5	27.60	117	2136984	50.00	ppb		0.03
61) 1,4-dichlorobenzene-d4	32.14	152	983518	50.00	ppb		0.03
System Monitoring Compounds							**%Recovery**
2) Dibromofluoromethane	20.57	113	875870	50.26	ppb		100.52%
31) Toluene-d8	24.85	98	2472243	48.30	ppb		96.61%
60) 4-bromofluorobenzene	29.83	95	1068203	48.18	ppb		96.35%
Target Compounds							**Qvalue**
3) dichlorodifluoromethane	9.65	85	74688	2.95	ppb		97
4) chloromethane	10.60	50	96816	3.70	ppb		97
5) vinyl chloride	11.16	62	94354	3.87	ppb		96
6) bromomethane	12.63	94	64175	8.16	ppb		100
7) chloroethane	13.03	64	61310	4.67	ppb		95
8) trichlorofluoromethane	13.97	101	111956	4.49	ppb		98
9) Methyliodide	16.03	142	109191	6.50	ppb		99
10) 1,1-dichloroethene	15.57	96	61236	4.75	ppb		90
11) methylene chloride	16.82	84	76934	4.43	ppb		98
12) trans-1,2-dichloroethene	17.48	96	71253	4.91	ppb		96
13) Ethylether	14.91	74	39830	3.90	ppb		100
14) Acetone	15.73	43	26802	3.02	ppb		92
15) Carbondisulfide	16.26	76	247658	4.70	ppb		99
16) Acrolein	19.79	55	50867	3.09	ppb		100
17) Acrylonitrile	17.39	52	17781	3.18	ppb		100
18) Diisopropylether	18.48	87	68457	4.43	ppb	#	59
19) Methyl-tert-butyl Ether (M	17.47	73	148069	3.71	ppb		96
20) Vinylacetate	18.48	43	194437	4.95	ppb		100
21) 1,1-dichloroethane	18.42	63	154950	4.96	ppb		96
22) 2,2-dichloropropane	19.67	77	98108	4.98	ppb		92
23) cis-1,2-dichloroethene	19.65	96	70980	4.71	ppb		97
24) bromochloromethane	20.15	128	35416	4.56	ppb	#	83
25) 2-Butanone (MEK)	19.65	72	6652	2.87	ppb	#	63
26) Tetrahydrofuran	20.30	72	6364	2.84	ppb		90
27) chloroform	20.24	83	121179	4.75	ppb		98
28) 1,1,1-trichloroethane	20.70	97	97777	4.81	ppb	#	85
29) Allyl chloride	16.26	76	247658	4.70	ppb	#	75
32) 4-Methyl-2-pentanone (MIBK	24.47	43	58034	2.94	ppb		97
33) 2-Chloroethyl Vinyl Ether	23.91	63	29168	3.34	ppb		100
34) carbon tetrachloride	21.04	117	73053	4.30	ppb		94
35) 1,1-dichloropropene	21.00	75	91805	4.70	ppb		96
36) benzene	21.42	78	281670	4.75	ppb		96
37) 1,2-dichloroethane	21.41	62	84113	4.37	ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H30SEP98\IC2.D
Acq On : 30 Sep 98 4:52 pm
Sample : 5 ppb
Misc :
Quant Time: Sep 30 17:33 1998

Vial: 2
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38.M
Title : SW-8260 Purgable Organics
Last Update : Tue Sep 29 09:39:04 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	trichloroethene	22.60	95	82223	4.67	ppb		97
39)	1,2-dichloropropane	23.03	63	88753	4.73	ppbL		96
40)	dibromomethane	23.29	93	46016	4.24	ppb	#	78
41)	bromodichloromethane	23.50	83	87841	4.33	ppb		99
42)	cis-1,3-dichloropropene	24.30	75	99094	4.22	ppb		94
43)	toluene	24.98	92	156597	4.53	ppb		94
44)	trans-1,3-dichloropropene	25.27	75	81217	3.97	ppb		99
45)	1,1,2-trichloroethane	25.67	83	52620	4.07	ppb		93
46)	1,2-Dibromoethane	26.79	107	55796	3.54	ppb	#	98
47)	1,4-dichloro-2-butene	30.09	53	7345	2.42	ppb	#	6
49)	tetrachloroethene	26.06	166	123501	5.02	ppb		91
50)	1,3-dichloropropane	26.00	76	105850	4.15	ppb		100
51)	dibromochloromethane	26.50	129	61612	4.13	ppb		96
52)	chlorobenzene	27.67	112	175853	4.70	ppb		96
53)	1,1,1,2-tetrachloroethane	27.77	131	60635	4.37	ppb	#	78
54)	ethylbenzene	27.79	91	249181	3.99	ppb		95
5[illegible])	para & meta xylene	28.00	106	218973	9.35	ppb	#	79
5[illegible])	ortho xylene	28.79	106	108833	4.68	ppb	#	83
57)	styrene	28.80	104	162127	4.33	ppb		91
58)	2-Hexanone (MBK)	26.01	43	52514	3.41	ppb	#	92
59)	bromoform	29.27	173	32557	3.47	ppb		95
62)	Isopropyl benzene	29.45	105	272769	5.23	ppb		94
63)	bromobenzene	30.23	156	68477	4.76	ppb	#	81
64)	1,1,2,2-tetrachloroethane	29.98	83	71760	3.72	ppb		96
65)	1,2,3-trichloropropane	30.14	75	73187	3.57	ppb		92
66)	n-propylbenzene	30.26	91	334477	4.97	ppb		99
67)	2-chlorotoluene	30.54	91	229115	4.95	ppb		93
68)	4-chlorotoluene	30.73	91	187116	4.85	ppb		94
69)	1,3,5-trimethylbenzene	30.56	105	223452	5.07	ppb		86
70)	tert-butylbenzene	31.26	119	227284	4.99	ppb		86
71)	1,2,4-trimethylbenzene	31.33	105	222750	4.96	ppb		90
72)	sec-butylbenzene	31.68	105	314893	5.06	ppb		100
73)	1,3-dichlorobenzene	32.03	146	122014	4.60	ppb		95
74)	p-isopropyltoluene	31.92	119	257671	4.84	ppb		94
75)	1,4-dichlorobenzene	32.20	146	124376	4.48	ppb		100
76)	1,2-dichlorobenzene	32.98	146	123891	4.50	ppb		98
77)	n-butylbenzene	32.76	91	247151	4.90	ppb		94
78)	1,2-dibromo-3-chloropropan	34.54	75	10844	3.38	ppb	#	84
80)	hexachlorobutadiene	36.80	225	44883	5.05	ppb		99
83)	hexachloroethane	33.53	201	15092	3.31	ug/l	#	100
84)	2-methylnapthalene	40.47	142	934	2.10	ug/l	#	100

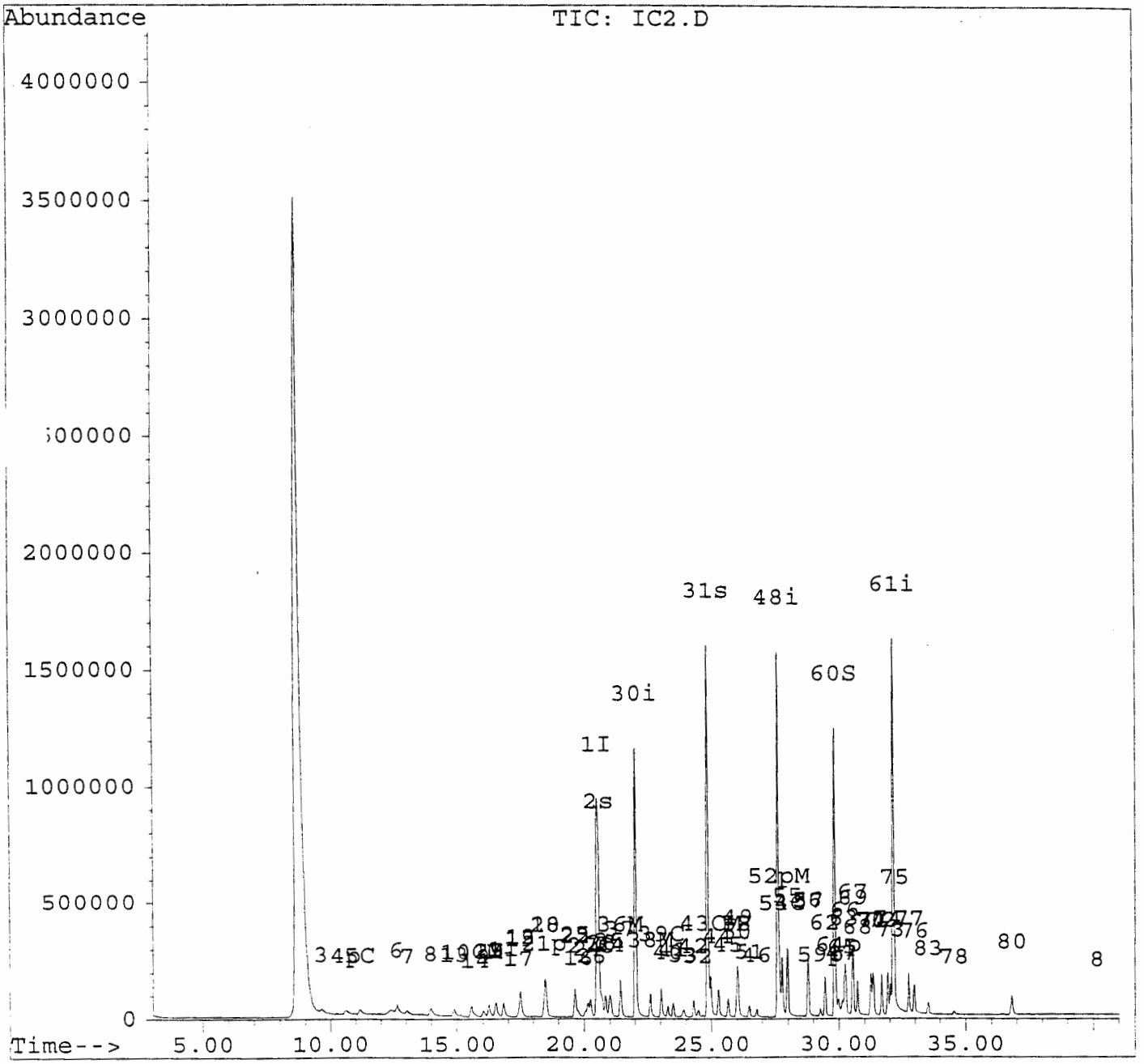
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H30SEP98\IC2.D
Acq On : 30 Sep 98 4:52 pm
Sample : 5 ppb
Misc :
Quant Time: Sep 30 17:33 1998

Vial: 2
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38.M
Title : SW-8260 Purgable Organics
Last Update : Tue Sep 29 09:39:04 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\H30SEP98\IC3.D
Acq On : 30 Sep 98 5:43 pm
Sample : 10 ppb
Misc :
Quant Time: Sep 30 18:24 1998

Vial: 3
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38.M
Title : SW-8260 Purgable Organics
Last Update : Tue Sep 29 09:39:04 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	20.51	168	1310831	50.00 ppb		0.03
30) 1,4-Difluorobenzene	22.01	114	2076502	50.00 ppb		0.03
48) Chlorobenzene-d5	27.60	117	1891519	50.00 ppb		0.03
61) 1,4-dichlorobenzene-d4	32.15	152	949380	50.00 ppb		0.04
System Monitoring Compounds						**%Recovery**
2) Dibromofluoromethane	20.57	113	790027	51.71 ppb		103.43%
31) Toluene-d8	24.85	98	2178236	48.31 ppb		96.61%
60) 4-bromofluorobenzene	29.83	95	997830	50.84 ppb		101.68%
Target Compounds						**Qvalue**
3) dichlorodifluoromethane	9.68	85	136734	6.15 ppb		96
4) chloromethane	10.62	50	182837	7.97 ppb		97
5) vinyl chloride	11.19	62	175204	8.20 ppb		98
6) bromomethane	12.63	94	92979	13.48 ppb	#	64
7) chloroethane	13.04	64	108251	9.40 ppb		95
8) trichlorofluoromethane	13.98	101	200288	9.17 ppb		100
9) Methyliodide	16.04	142	182990	12.42 ppb		99
10) 1,1-dichloroethene	15.59	96	111039	9.83 ppb		92
11) methylene chloride	16.83	84	154997	10.18 ppb		99
12) trans-1,2-dichloroethene	17.50	96	125392	9.85 ppb		100
13) Ethylether	14.92	74	73373	8.20 ppb		100
14) Acetone	15.74	43	54209	6.96 ppb		99
15) Carbondisulfide	16.27	76	448419	9.71 ppb		99
16) Acrolein	19.78	55	107879	7.48 ppb		100
17) Acrylonitrile	17.39	52	34956	7.14 ppb		100
18) Diisopropylether	18.50	87	136515	10.08 ppb		66
19) Methyl-tert-butyl Ether (M	17.48	73	288472	8.24 ppb		98
20) Vinylacetate	18.50	43	355242	10.31 ppb		100
21) 1,1-dichloroethane	18.44	63	286439	10.46 ppb		98
22) 2,2-dichloropropane	19.66	77	178974	10.36 ppb		93
23) cis-1,2-dichloroethene	19.65	96	131571	9.95 ppb		97
24) bromochloromethane	20.15	128	63261	9.29 ppb	#	75
25) 2-Butanone (MEK)	19.65	72	13734	6.76 ppb		79
26) Tetrahydrofuran	20.28	72	11809	6.02 ppb		84
27) chloroform	20.25	83	225855	10.10 ppb		94
28) 1,1,1-trichloroethane	20.69	97	182454	10.24 ppb		88
29) Allyl chloride	16.27	76	448419	9.71 ppb	#	99
32) 4-Methyl-2-pentanone (MIBK	24.47	43	115304	6.64 ppb		98
33) 2-Chloroethyl Vinyl Ether	23.91	63	62496	8.12 ppb		100
34) carbon tetrachloride	21.06	117	137675	9.20 ppb		99
35) 1,1-dichloropropene	21.00	75	172709	10.03 ppb		99
36) benzene	21.44	78	521773	9.99 ppb		95
37) 1,2-dichloroethane	21.41	62	154486	9.11 ppb		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H30SEP98\IC3.D
Acq On : 30 Sep 98 5:43 pm
Sample : 10 ppb
Misc :
Quant Time: Sep 30 18:24 1998

Vial: 3
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38.M
Title : SW-8260 Purgable Organics
Last Update : Tue Sep 29 09:39:04 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	trichloroethene	22.60	95	151044	9.75	ppb		98
39)	1,2-dichloropropane	23.03	63	168706	10.20	ppbL		97
40)	dibromomethane	23.28	93	85087	8.89	ppb	#	77
41)	bromodichloromethane	23.50	83	167393	9.37	ppb		95
42)	cis-1,3-dichloropropene	24.30	75	195129	9.43	ppb		96
43)	toluene	24.98	92	286603	9.41	ppb		99
44)	trans-1,3-dichloropropene	25.27	75	160225	8.90	ppb		96
45)	1,1,2-trichloroethane	25.66	83	98852	8.69	ppb		95
46)	1,2-Dibromoethane	26.78	107	107638	7.76	ppb	#	97
47)	1,4-dichloro-2-butene	30.07	53	17120	6.40	ppb	#	8
49)	tetrachloroethene	26.06	166	216597	9.95	ppb		90
50)	1,3-dichloropropane	26.00	76	202532	8.98	ppb		97
51)	dibromochloromethane	26.48	129	119780	9.08	ppb		98
52)	chlorobenzene	27.66	112	327401	9.89	ppb		98
53)	1,1,1,2-tetrachloroethane	27.77	131	116152	9.46	ppb	#	78
54)	ethylbenzene	27.78	91	484241	8.77	ppb		96
5)	para & meta xylene	28.00	106	423596	20.43	ppb	#	78
,6)	ortho xylene	28.78	106	216860	10.54	ppb	#	80
57)	styrene	28.80	104	333078	10.06	ppb		95
58)	2-Hexanone (MBK)	26.00	43	105840	7.76	ppb	#	97
59)	bromoform	29.27	173	69105	8.33	ppb		96
62)	Isopropyl benzene	29.45	105	544489	10.82	ppb		94
63)	bromobenzene	30.22	156	135199	9.73	ppb	#	82
64)	1,1,2,2-tetrachloroethane	29.98	83	148313	7.96	ppb		99
65)	1,2,3-trichloropropane	30.13	75	149056	7.54	ppb		94
66)	n-propylbenzene	30.25	91	664981	10.24	ppb		100
67)	2-chlorotoluene	30.54	91	455227	10.20	ppb		95
68)	4-chlorotoluene	30.72	91	377517	10.13	ppb		94
69)	1,3,5-trimethylbenzene	30.56	105	447997	10.52	ppb		90
70)	tert-butylbenzene	31.25	119	455835	10.38	ppb		85
71)	1,2,4-trimethylbenzene	31.35	105	442543	10.21	ppb		88
72)	sec-butylbenzene	31.68	105	632980	10.54	ppb		99
73)	1,3-dichlorobenzene	32.03	146	239174	9.35	ppb		97
74)	p-isopropyltoluene	31.92	119	523583	10.20	ppb		95
75)	1,4-dichlorobenzene	32.19	146	249613	9.31	ppb		99
76)	1,2-dichlorobenzene	32.98	146	249545	9.38	ppb		98
77)	n-butylbenzene	32.75	91	499056	10.25	ppb		94
78)	1,2-dibromo-3-chloropropan	34.54	75	20679	6.67	ppb	#	83
79)	1,2,4-trichlorobenzene	36.48	180	42813	4.06	ppb		93
80)	hexachlorobutadiene	36.82	225	92793	10.82	ppb		98
81)	naphthalene	37.16	128	32585	1.35	ppb		100
82)	1,2,3-trichlorobenzene	37.79	180	2465	0.33	ppb	#	68
3)	hexachloroethane	33.53	201	35827	8.15	ug/l	#	100
4)	2-methylnapthalene	40.47	142	2492	5.80	ug/l	#	100

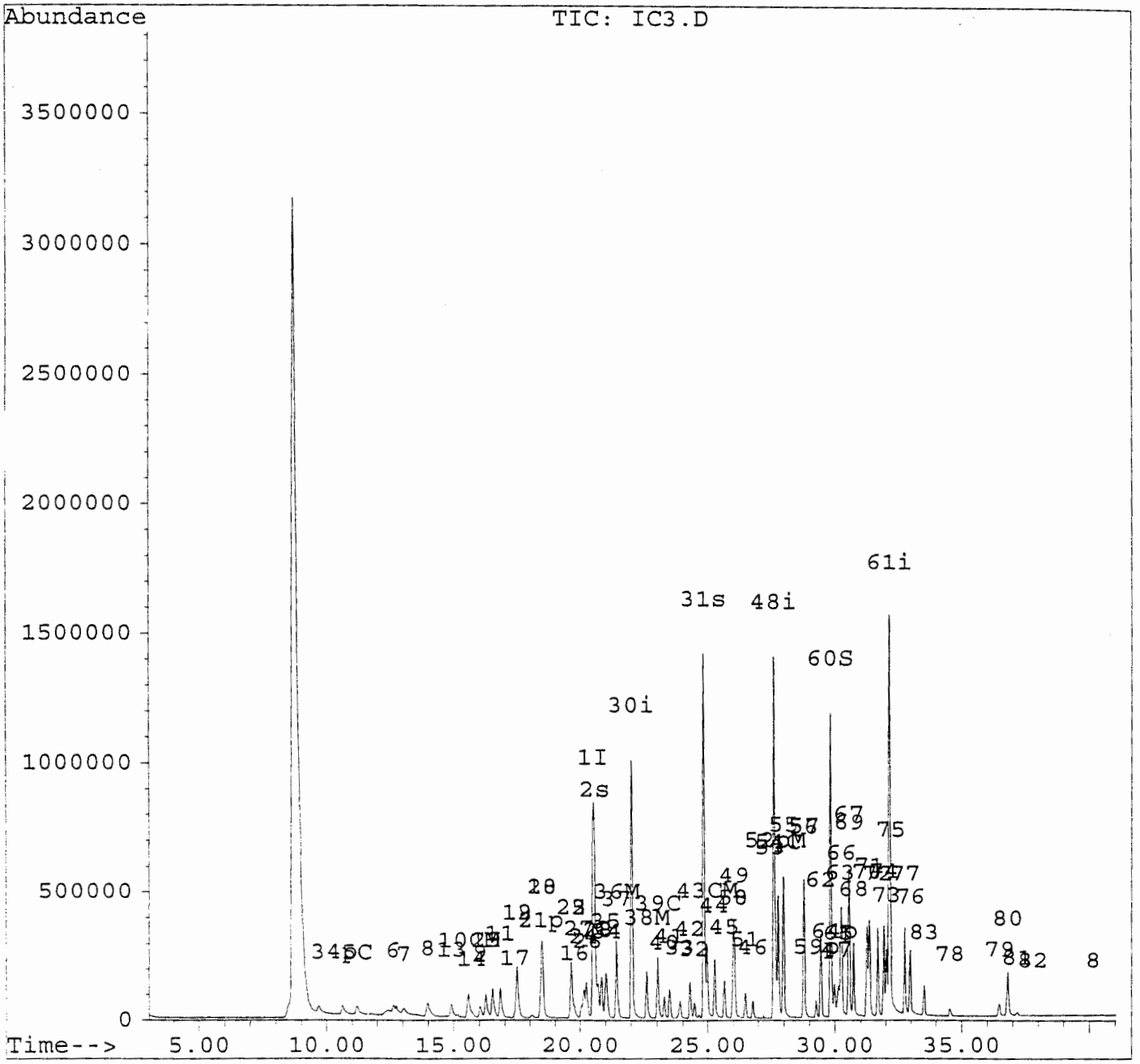
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H30SEP98\IC3.D
Acq On : 30 Sep 98 5:43 pm
Sample : 10 ppb
Misc :
Quant Time: Sep 30 18:24 1998

Vial: 3
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38.M
Title : SW-8260 Purgable Organics
Last Update : Tue Sep 29 09:39:04 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\H30SEP98\IC4.D
Acq On : 30 Sep 98 6:34 pm
Sample : 25 ppb
Misc :
Quant Time: Sep 30 19:15 1998

Vial: 4
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38.M
Title : SW-8260 Purgable Organics
Last Update : Tue Sep 29 09:39:04 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Pentafluorobenzene	20.51	168	1040486	50.00	ppb		0.03
30) 1,4-Difluorobenzene	22.01	114	1677785	50.00	ppb		0.03
48) Chlorobenzene-d5	27.60	117	1598367	50.00	ppb		0.03
61) 1,4-dichlorobenzene-d4	32.13	152	849103	50.00	ppb		0.03
System Monitoring Compounds							%Recovery
2) Dibromofluoromethane	20.57	113	634012	52.28	ppb		104.57%
31) Toluene-d8	24.85	98	1786844	49.04	ppb		98.09%
60) 4-bromofluorobenzene	29.83	95	857708	51.72	ppb		103.44%
Target Compounds							Qvalue
3) dichlorodifluoromethane	9.68	85	350764	19.88	ppb		98
4) chloromethane	10.63	50	439308	24.11	ppb		97
5) vinyl chloride	11.19	62	419566	24.75	ppb		100
6) bromomethane	12.65	94	238246	43.52	ppb		99
7) chloroethane	13.06	64	225829	24.71	ppb		96
8) trichlorofluoromethane	14.00	101	441184	25.44	ppb		99
9) Methyliodide	16.04	142	408240	34.90	ppb		100
10) 1,1-dichloroethene	15.59	96	241843	26.99	ppb		91
11) methylene chloride	16.83	84	310305	25.67	ppb		99
12) trans-1,2-dichloroethene	17.50	96	270689	26.79	ppb		96
13) Ethylether	14.91	74	158675	22.34	ppb		100
14) Acetone	15.72	43	118024	19.09	ppb		92
15) Carbondisulfide	16.27	76	980747	26.76	ppb		99
16) Acrolein	19.79	55	234178	20.45	ppb		100
17) Acrylonitrile	17.39	52	75407	19.41	ppb		100
18) Diisopropylether	18.50	87	307827	28.63	ppb	#	63
19) Methyl-tert-butyl Ether (M	17.48	73	655876	23.60	ppb		93
20) Vinylacetate	18.48	43	782112	28.59	ppb		100
21) 1,1-dichloroethane	18.44	63	625314	28.76	ppb		97
22) 2,2-dichloropropane	19.66	77	382598	27.90	ppb		94
23) cis-1,2-dichloroethene	19.65	96	290421	27.67	ppb		97
24) bromochloromethane	20.15	128	140379	25.97	ppb	#	74
25) 2-Butanone (MEK)	19.62	72	30840	19.12	ppb		98
26) Tetrahydrofuran	20.27	72	27416	17.61	ppb		79
27) chloroform	20.24	83	485325	27.35	ppb		93
28) 1,1,1-trichloroethane	20.69	97	392078	27.72	ppb		90
29) Allyl chloride	16.27	76	980747	26.76	ppb	#	99
32) 4-Methyl-2-pentanone (MIBK	24.47	43	283034	20.17	ppb	#	96
33) 2-Chloroethyl Vinyl Ether	23.89	63	142762	22.95	ppb		100
34) carbon tetrachloride	21.06	117	315476	26.09	ppb		95
35) 1,1-dichloropropene	21.00	75	383680	27.58	ppb		100
36) benzene	21.42	78	1141690	27.04	ppb		96
37) 1,2-dichloroethane	21.41	62	345606	25.23	ppb		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H30SEP98\IC4.D
Acq On : 30 Sep 98 6:34 pm
Sample : 25 ppb
Misc :
Quant Time: Sep 30 19:15 1998

Vial: 4
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38.M
Title : SW-8260 Purgable Organics
Last Update : Tue Sep 29 09:39:04 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	trichloroethene	22.60	95	332573	26.56	ppb		98
39)	1,2-dichloropropane	23.03	63	371322	27.78	ppbL		95
40)	dibromomethane	23.29	93	188298	24.35	ppb	#	76
41)	bromodichloromethane	23.50	83	378182	26.21	ppb		98
42)	cis-1,3-dichloropropene	24.29	75	452074	27.05	ppb		97
43)	toluene	24.97	92	645584	26.23	ppb		98
44)	trans-1,3-dichloropropene	25.27	75	366490	25.19	ppb		94
45)	1,1,2-trichloroethane	25.65	83	225519	24.53	ppb		96
46)	1,2-Dibromoethane	26.77	107	258908	23.10	ppb	#	99
47)	1,4-dichloro-2-butene	30.07	53	43763	20.23	ppb	#	7
49)	tetrachloroethene	26.04	166	472576	25.70	ppb		88
50)	1,3-dichloropropane	26.00	76	464145	24.36	ppb		98
51)	dibromochloromethane	26.48	129	281454	25.24	ppb		98
52)	chlorobenzene	27.66	112	752115	26.89	ppb		95
53)	1,1,1,2-tetrachloroethane	27.77	131	272899	26.31	ppb	#	79
54)	ethylbenzene	27.79	91	1186832	25.43	ppb		95
5)	para & meta xylene	27.98	106	1006931	57.47	ppb	#	81
56)	ortho xylene	28.79	106	515635	29.67	ppb	#	83
57)	styrene	28.79	104	827572	29.58	ppb		97
58)	2-Hexanone (MBK)	25.98	43	262523	22.77	ppb		99
59)	bromoform	29.27	173	169626	24.20	ppb		99
62)	Isopropyl benzene	29.45	105	1339622	29.77	ppb		94
63)	bromobenzene	30.21	156	328642	26.46	ppb	#	73
64)	1,1,2,2-tetrachloroethane	29.98	83	362966	21.78	ppb		97
65)	1,2,3-trichloropropane	30.13	75	383105	21.67	ppb		94
66)	n-propylbenzene	30.26	91	1698825	29.25	ppb		99
67)	2-chlorotoluene	30.53	91	1118672	28.02	ppb		95
68)	4-chlorotoluene	30.73	91	948388	28.47	ppb		95
69)	1,3,5-trimethylbenzene	30.56	105	1118249	29.37	ppb		90
70)	tert-butylbenzene	31.24	119	1114888	28.37	ppb		86
71)	1,2,4-trimethylbenzene	31.33	105	1140826	29.42	ppb		90
72)	sec-butylbenzene	31.68	105	1619024	30.14	ppb		99
73)	1,3-dichlorobenzene	32.03	146	604757	26.43	ppb		98
74)	p-isopropyltoluene	31.92	119	1354230	29.49	ppb		94
75)	1,4-dichlorobenzene	32.18	146	610806	25.47	ppb		98
76)	1,2-dichlorobenzene	32.97	146	629115	26.44	ppb		97
77)	n-butylbenzene	32.74	91	1324927	30.43	ppb		93
78)	1,2-dibromo-3-chloropropan	34.53	75	55337	19.96	ppb		95
79)	1,2,4-trichlorobenzene	36.47	180	263295	27.92	ppb		98
80)	hexachlorobutadiene	36.80	225	239512	31.21	ppb		98
81)	naphthalene	37.15	128	458494	21.26	ppb		100
82)	1,2,3-trichlorobenzene	37.79	180	140989	20.89	ppb		98
3)	hexachloroethane	33.53	201	104345	26.54	ug/l	#	100
4)	2-methylnapthalene	40.47	142	9613	25.02	ug/l	#	100

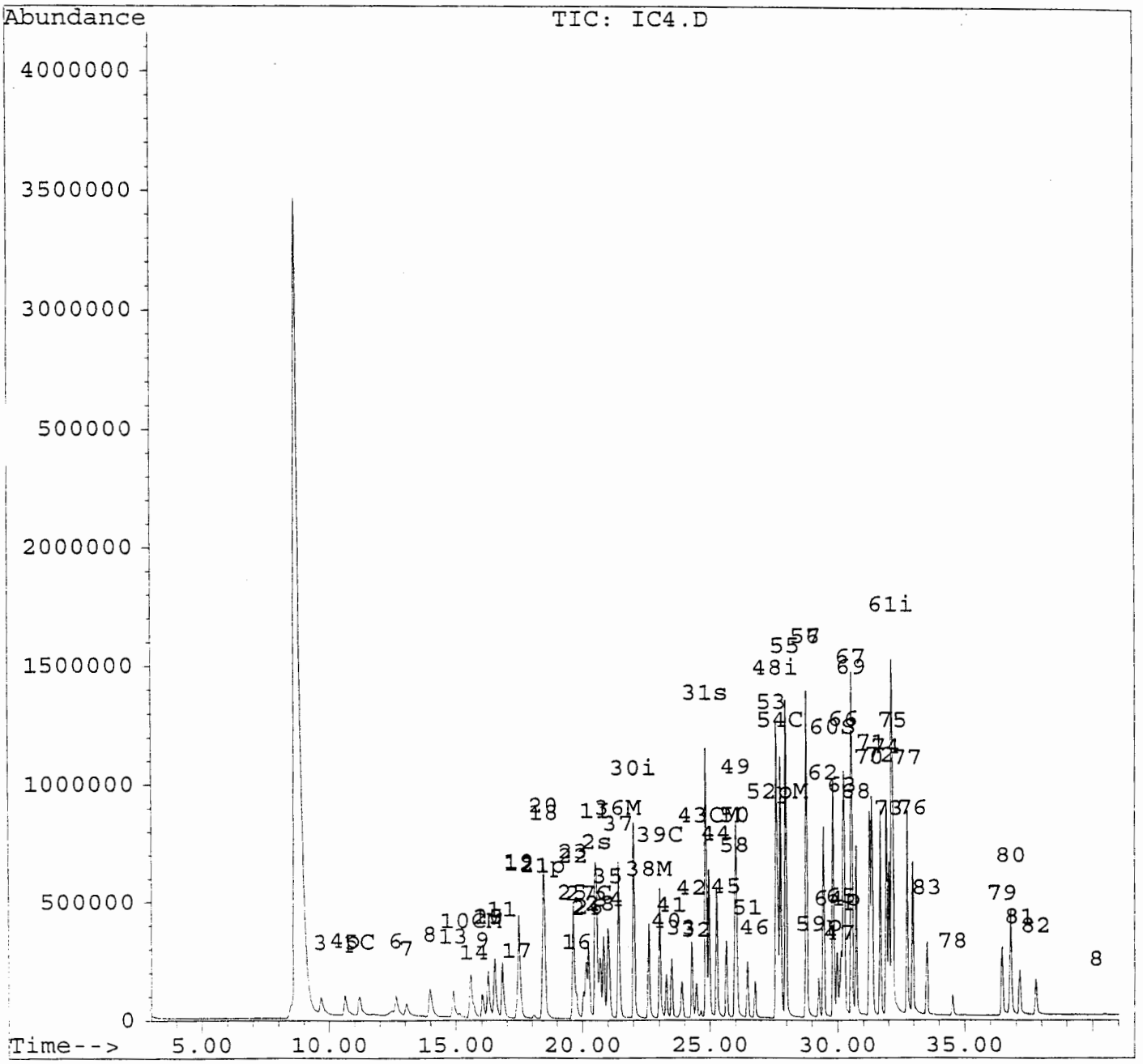
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H30SEP98\IC4.D
Acq On : 30 Sep 98 6:34 pm
Sample : 25 ppb
Misc :
Quant Time: Sep 30 19:15 1998

Vial: 4
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38.M
Title : SW-8260 Purgable Organics
Last Update : Tue Sep 29 09:39:04 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\H30SEP98\IC5.D
Acq On : 30 Sep 98 7:24 pm
Sample : 50 ppb
Misc :
Quant Time: Sep 30 20:06 1998

Vial: 5
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38.M
Title : SW-8260 Purgable Organics
Last Update : Tue Sep 29 09:39:04 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	20.50	168	1322572	50.00 ppb	0.01
30) 1,4-Difluorobenzene	22.01	114	2148743	50.00 ppb	0.03
48) Chlorobenzene-d5	27.60	117	2187859	50.00 ppb	0.03
61) 1,4-dichlorobenzene-d4	32.13	152	1196900	50.00 ppb	0.03
System Monitoring Compounds					**%Recovery**
2) Dibromofluoromethane	20.56	113	798156	51.78 ppb	103.56%
31) Toluene-d8	24.83	98	2373600	50.87 ppb	101.74%
60) 4-bromofluorobenzene	29.82	95	1168762	51.49 ppb	102.97%
Target Compounds					**Qvalue**
3) dichlorodifluoromethane	9.66	85	829351	36.98 ppb	99
4) chloromethane	10.62	50	1096726	47.36 ppb	97
5) vinyl chloride	11.18	62	1073725	49.83 ppb	98
6) bromomethane	12.63	94	598595	86.03 ppb	98
7) chloroethane	13.04	64	567629	48.87 ppb	97
8) trichlorofluoromethane	13.98	101	1016562	46.11 ppb	100
9) Methyliodide	16.03	142	915232	61.55 ppb	98
10) 1,1-dichloroethene	15.57	96	552953	48.54 ppb	91
11) methylene chloride	16.82	84	665639	43.32 ppb	98
12) trans-1,2-dichloroethene	17.48	96	617296	48.06 ppb	97
13) Ethylether	14.91	74	364572	40.38 ppb	100
14) Acetone	15.71	43	245800	31.28 ppb	91
15) Carbondisulfide	16.25	76	2247198	48.25 ppb	99
16) Acrolein	19.77	55	535455	36.78 ppb	100
17) Acrylonitrile	17.38	52	168112	34.04 ppb	100
18) Diisopropylether	18.48	87	701703	51.34 ppb #	61
19) Methyl-tert-butyl Ether (M	17.47	73	1495578	42.33 ppb	95
20) Vinylacetate	18.48	43	1754546	50.46 ppb	100
21) 1,1-dichloroethane	18.42	63	1401467	50.70 ppb	98
22) 2,2-dichloropropane	19.65	77	857294	49.18 ppb	92
23) cis-1,2-dichloroethene	19.63	96	660988	49.54 ppb	98
24) bromochloromethane	20.13	128	314000	45.70 ppb #	71
25) 2-Butanone (MEK)	19.60	72	67104	32.72 ppb	91
26) Tetrahydrofuran	20.27	72	64503	32.59 ppb	77
27) chloroform	20.24	83	1097033	48.64 ppb	97
28) 1,1,1-trichloroethane	20.69	97	896814	49.88 ppb	91
29) Allyl chloride	16.25	76	2247198	48.25 ppb #	99
32) 4-Methyl-2-pentanone (MIBK	24.45	43	662924	36.89 ppb #	97
33) 2-Chloroethyl Vinyl Ether	23.89	63	378315	47.49 ppb	100
34) carbon tetrachloride	21.04	117	744435	48.08 ppb	99
35) 1,1-dichloropropene	20.98	75	904633	50.78 ppb	99
36) benzene	21.42	78	2675126	49.48 ppb	96
37) 1,2-dichloroethane	21.39	62	780989	44.52 ppb	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H30SEP98\IC5.D
Acq On : 30 Sep 98 7:24 pm
Sample : 50 ppb
Misc :
Quant Time: Sep 30 20:06 1998

Vial: 5
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38.M
Title : SW-8260 Purgable Organics
Last Update : Tue Sep 29 09:39:04 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	trichloroethene	22.59	95	759703	47.37	ppb		98
39)	1,2-dichloropropane	23.01	63	861806	50.34	ppbL		95
40)	dibromomethane	23.27	93	433381	43.76	ppb	#	76
41)	bromodichloromethane	23.48	83	886010	47.94	ppb		98
42)	cis-1,3-dichloropropene	24.29	75	1084800	50.68	ppb		97
43)	toluene	24.97	92	1564045	49.62	ppb		98
44)	trans-1,3-dichloropropene	25.26	75	908526	48.75	ppb		96
45)	1,1,2-trichloroethane	25.65	83	541154	45.96	ppb		96
46)	1,2-Dibromoethane	26.77	107	638384	44.47	ppb	#	98
47)	1,4-dichloro-2-butene	30.06	53	120989	43.68	ppb	#	7
49)	tetrachloroethene	26.04	166	1152916	45.81	ppb		88
50)	1,3-dichloropropane	25.98	76	1128516	43.26	ppb		99
51)	dibromochloromethane	26.48	129	698797	45.78	ppb		100
52)	chlorobenzene	27.66	112	1847286	48.26	ppb		96
53)	1,1,1,2-tetrachloroethane	27.76	131	673293	47.42	ppb	#	80
54)	ethylbenzene	27.77	91	3101046	48.53	ppb		96
5)	para & meta xylene	27.98	106	2514764	104.85	ppb	#	82
6)	ortho xylene	28.79	106	1261052	53.01	ppb	#	83
57)	styrene	28.79	104	2069806	54.05	ppb		94
58)	2-Hexanone (MBK)	25.98	43	664152	42.08	ppb		98
59)	bromoform	29.26	173	424923	44.29	ppb		98
62)	Isopropyl benzene	29.45	105	3338347	52.63	ppb		95
63)	bromobenzene	30.21	156	808519	46.18	ppb	#	74
64)	1,1,2,2-tetrachloroethane	29.97	83	860348	36.63	ppb		98
65)	1,2,3-trichloropropane	30.12	75	904193	36.29	ppb		92
66)	n-propylbenzene	30.26	91	4347511	53.11	ppb		99
67)	2-chlorotoluene	30.53	91	2791973	49.61	ppb		96
68)	4-chlorotoluene	30.71	91	2381340	50.71	ppb		96
69)	1,3,5-trimethylbenzene	30.54	105	2796603	52.11	ppb		93
70)	tert-butylbenzene	31.24	119	2760720	49.85	ppb		86
71)	1,2,4-trimethylbenzene	31.33	105	2873384	52.56	ppb		91
72)	sec-butylbenzene	31.68	105	3992348	52.73	ppb		100
73)	1,3-dichlorobenzene	32.03	146	1560592	48.38	ppb		98
74)	p-isopropyltoluene	31.91	119	3450238	53.30	ppb		95
75)	1,4-dichlorobenzene	32.18	146	1597226	47.25	ppb		98
76)	1,2-dichlorobenzene	32.97	146	1634182	48.72	ppb		98
77)	n-butylbenzene	32.74	91	3502000	57.05	ppb		94
78)	1,2-dibromo-3-chloropropan	34.53	75	149934	38.37	ppb		98
79)	1,2,4-trichlorobenzene	36.45	180	890355	66.98	ppb		100
80)	hexachlorobutadiene	36.80	225	571063	52.80	ppb		99
81)	naphthalene	37.15	128	1739523	57.21	ppb		100
82)	1,2,3-trichlorobenzene	37.79	180	637178	66.97	ppb		100
1)	hexachloroethane	33.53	201	316079	57.03	ug/l	#	100
2)	2-methylnapthalene	40.47	142	38934	71.88	ug/l	#	100

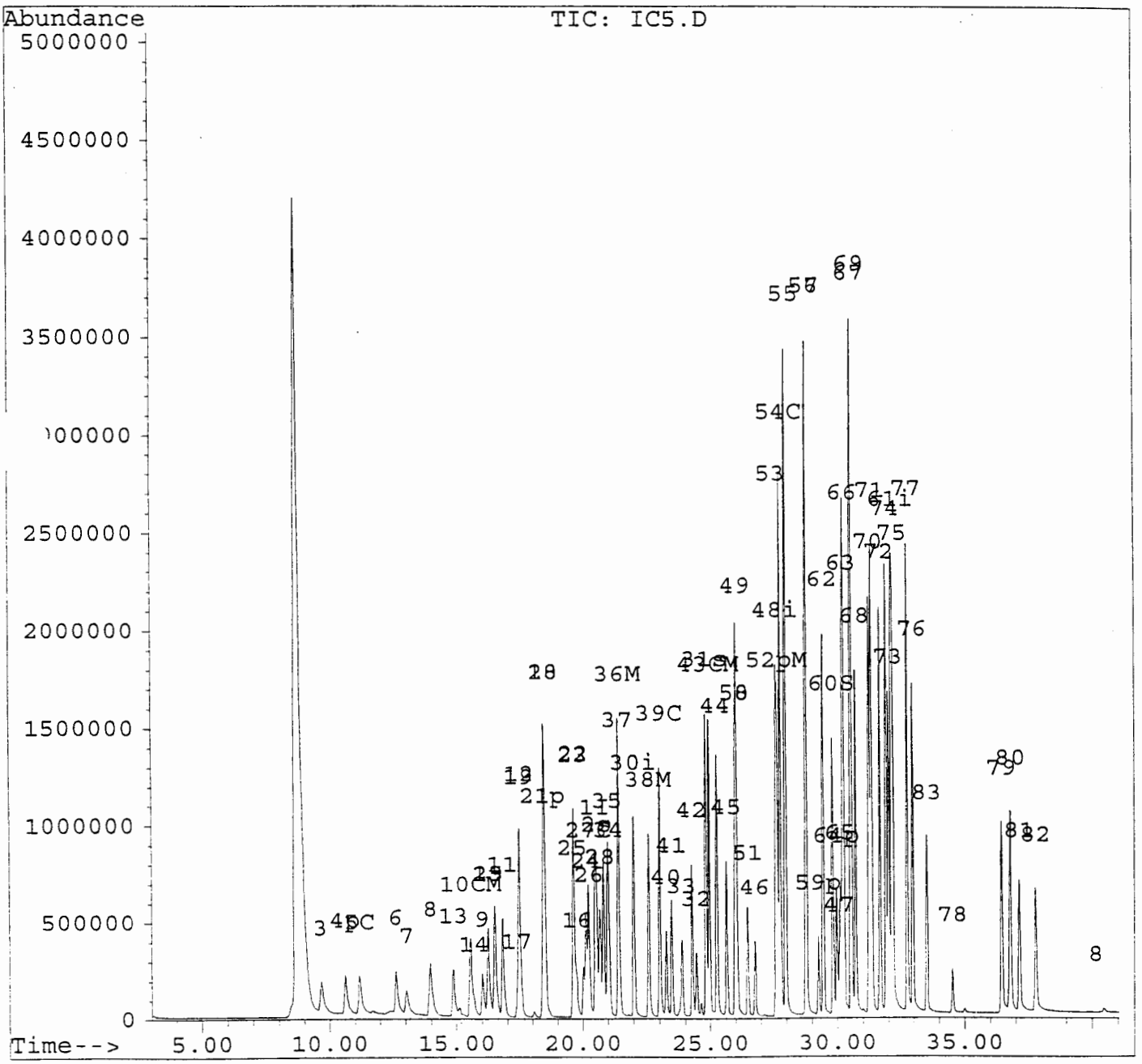
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H30SEP98\IC5.D
Acq On : 30 Sep 98 7:24 pm
Sample : 50 ppb
Misc :
Quant Time: Sep 30 20:06 1998

Vial: 5
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38.M
Title : SW-8260 Purgable Organics
Last Update : Tue Sep 29 09:39:04 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\H30SEP98\IC6.D
Acq On : 30 Sep 98 8:14 pm
Sample : 100 ppb
Misc :
Quant Time: Sep 30 20:56 1998

Vial: 6
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38.M
Title : SW-8260 Purgable Organics
Last Update : Tue Sep 29 09:39:04 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	20.50	168	1731959	50.00 ppb	0.01
30) 1,4-Difluorobenzene	22.00	114	2864903	50.00 ppb	0.01
48) Chlorobenzene-d5	27.60	117	2853317	50.00 ppb	0.03
61) 1,4-dichlorobenzene-d4	32.14	152	1789026	50.00 ppb	0.03
System Monitoring Compounds					**%Recovery**
2) Dibromofluoromethane	20.56	113	1031582	51.11 ppb	102.21%
31) Toluene-d8	24.83	98	3202749	51.48 ppb	102.96%
60) 4-bromofluorobenzene	29.82	95	1505781	50.86 ppb	101.72%
Target Compounds					**Qvalue**
3) dichlorodifluoromethane	9.63	85	2333883	79.47 ppb	98
4) chloromethane	10.59	50	3013578	99.38 ppb	97
5) vinyl chloride	11.15	62	3078208	109.08 ppb	99
6) bromomethane	12.60	94	725970	79.67 ppb	97
7) chloroethane	13.00	64	1659653	109.11 ppb	96
8) trichlorofluoromethane	13.95	101	2934460	101.64 ppb	100
9) Methyliodide	16.01	142	2611683	134.13 ppb	97
10) 1,1-dichloroethene	15.56	96	1523354	102.12 ppb	90
11) methylene chloride	16.80	84	1839983	91.45 ppb	99
12) trans-1,2-dichloroethene	17.47	96	1728866	102.78 ppb	96
13) Ethylether	14.89	74	1071260	90.60 ppb	100
14) Acetone	15.70	43	549910	53.44 ppb	95
15) Carbondisulfide	16.24	76	6270213	102.80 ppb	99
16) Acrolein	19.76	55	1565859	82.14 ppb	100
17) Acrylonitrile	17.36	52	476130	73.61 ppb	100
18) Diisopropylether	18.47	87	2015051	112.59 ppb #	58
19) Methyl-tert-butyl Ether (M	17.45	73	4283402	92.58 ppb	93
20) Vinylacetate	18.47	43	4987557	109.53 ppb	100
21) 1,1-dichloroethane	18.41	63	3964202	109.52 ppb	98
22) 2,2-dichloropropane	19.65	77	2369832	103.81 ppb	93
23) cis-1,2-dichloroethene	19.63	96	1870271	107.05 ppb	98
24) bromochloromethane	20.13	128	894675	99.43 ppb #	71
25) 2-Butanone (MEK)	19.60	72	171685	63.93 ppb	97
26) Tetrahydrofuran	20.26	72	186133	71.81 ppb #	75
27) chloroform	20.23	83	3131842	106.03 ppb	98
28) 1,1,1-trichloroethane	20.68	97	2472237	105.01 ppb	91
29) Allyl chloride	16.24	76	6270213	102.80 ppb #	99
32) 4-Methyl-2-pentanone (MIBK	24.45	43	1928539	80.49 ppb #	97
33) 2-Chloroethyl Vinyl Ether	23.89	63	1192029	112.23 ppb	100
34) carbon tetrachloride	21.04	117	2123699	102.87 ppb	98
35) 1,1-dichloropropene	20.98	75	2609476	109.87 ppb	99
36) benzene	21.41	78	7793978	108.12 ppb	96
37) 1,2-dichloroethane	21.39	62	2199674	94.04 ppb	94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H30SEP98\IC6.D
Acq On : 30 Sep 98 8:14 pm
Sample : 100 ppb
Misc :
Quant Time: Sep 30 20:56 1998

Vial: 6
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38.M
Title : SW-8260 Purgable Organics
Last Update : Tue Sep 29 09:39:04 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	trichloroethene	22.59	95	2190203	102.43	ppb		99
39)	1,2-dichloropropane	23.01	63	2478978	108.61	ppbL		95
40)	dibromomethane	23.27	93	1241017	93.99	ppb	#	78
41)	bromodichloromethane	23.48	83	2565805	104.14	ppb		98
42)	cis-1,3-dichloropropene	24.29	75	3207118	112.37	ppb		96
43)	toluene	24.97	92	4501751	107.11	ppb		98
44)	trans-1,3-dichloropropene	25.26	75	2621236	105.50	ppb		97
45)	1,1,2-trichloroethane	25.65	83	1503453	95.78	ppb		95
46)	1,2-Dibromoethane	26.77	107	1794733	93.78	ppb	#	98
47)	1,4-dichloro-2-butene	30.06	53	371640	100.63	ppb	#	7
49)	tetrachloroethene	26.04	166	3445714	104.98	ppb		88
50)	1,3-dichloropropane	25.98	76	3268009	96.07	ppb		98
51)	dibromochloromethane	26.48	129	1991283	100.02	ppb		100
52)	chlorobenzene	27.67	112	5244394	105.05	ppb		96
53)	1,1,1,2-tetrachloroethane	27.76	131	1964414	106.09	ppb	#	80
54)	ethylbenzene	27.77	91	9216922	110.61	ppb		97
5)	para & meta xylene	27.98	106	7274359	232.56	ppb	#	84
5)	ortho xylene	28.79	106	3647101	117.55	ppb	#	83
57)	styrene	28.79	104	6089118	121.93	ppb		94
58)	2-Hexanone (MBK)	25.98	43	1822034	88.51	ppb		98
59)	bromoform	29.26	173	1191993	95.28	ppb		99
62)	Isopropyl benzene	29.45	105	9529417	100.51	ppb		95
63)	bromobenzene	30.21	156	2319480	88.63	ppb	#	73
64)	1,1,2,2-tetrachloroethane	29.97	83	2264143	64.49	ppb		98
65)	1,2,3-trichloropropane	30.12	75	2584155	69.39	ppb		91
66)	n-propylbenzene	30.26	91	12817837	104.75	ppb		100
67)	2-chlorotoluene	30.53	91	8582500	102.03	ppb		99
68)	4-chlorotoluene	30.73	91	7164975	102.07	ppb		94
69)	1,3,5-trimethylbenzene	30.54	105	8610149	107.34	ppb		95
70)	tert-butylbenzene	31.24	119	9417511	113.76	ppb		87
71)	1,2,4-trimethylbenzene	31.33	105	9066100	110.95	ppb		95
72)	sec-butylbenzene	31.68	105	12732203	112.50	ppb		98
73)	1,3-dichlorobenzene	32.01	146	5054325	104.84	ppb		96
74)	p-isopropyltoluene	31.91	119	11343349	117.25	ppb		95
75)	1,4-dichlorobenzene	32.18	146	5301478	104.93	ppb		97
76)	1,2-dichlorobenzene	32.97	146	5372997	107.17	ppb		98
77)	n-butylbenzene	32.74	91	12454048	135.74	ppb		93
78)	1,2-dibromo-3-chloropropan	34.51	75	480432	82.25	ppb		92
79)	1,2,4-trichlorobenzene	36.45	180	3390774	170.66	ppb		99
80)	hexachlorobutadiene	36.80	225	1966443	121.63	ppb		97
81)	naphthalene	37.14	128	6946174	152.83	ppb		100
82)	1,2,3-trichlorobenzene	37.79	180	2655158	186.69	ppb		99
3)	hexachloroethane	33.53	201	1184046	142.93	ug/l	#	100
)	2-methylnapthalene	40.45	142	166673	205.87	ug/l	#	100

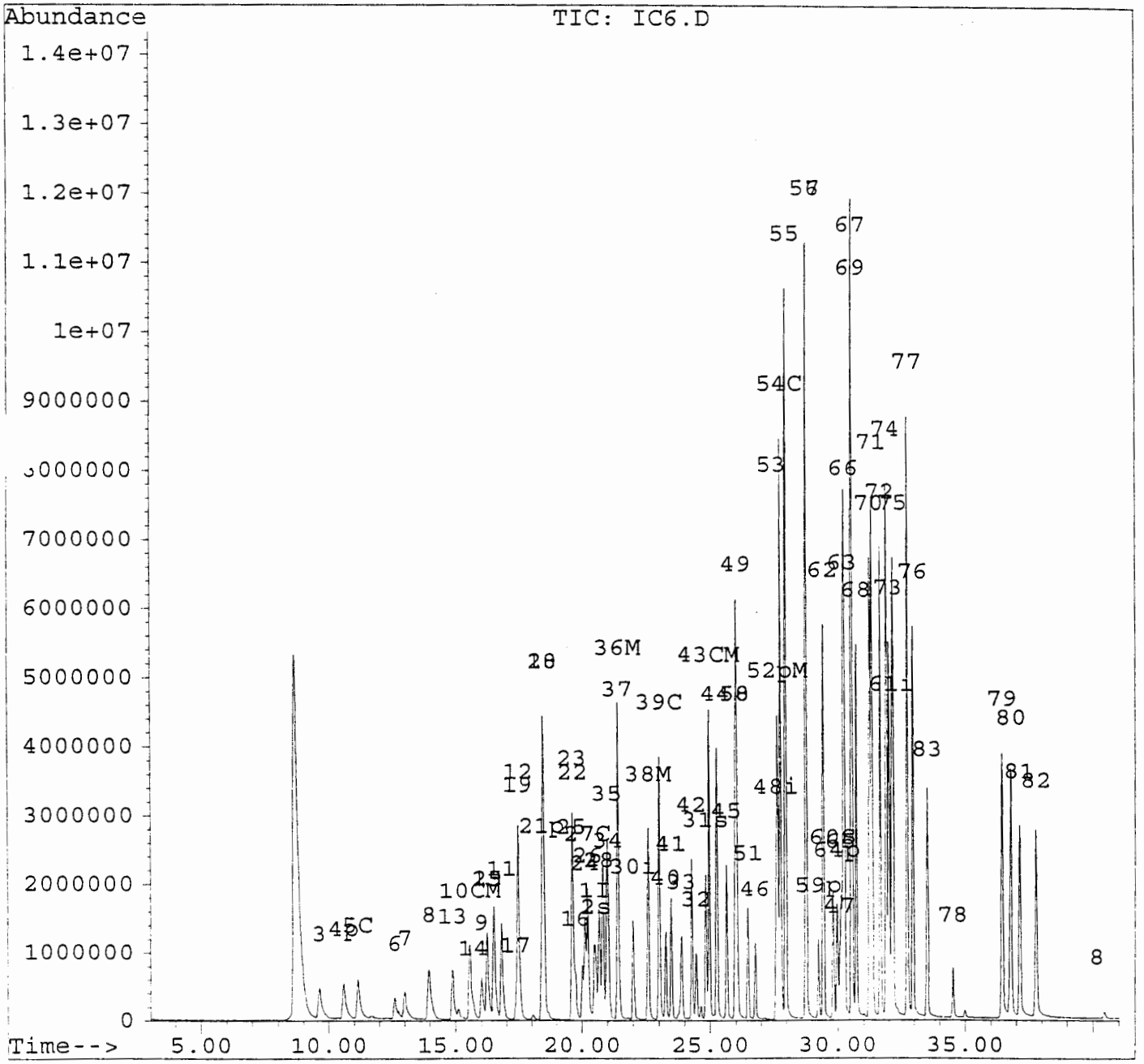
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H30SEP98\IC6.D
Acq On : 30 Sep 98 8:14 pm
Sample : 100 ppb
Misc :
Quant Time: Sep 30 20:56 1998

Vial: 6
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260S38.M
Title : SW-8260 Purgable Organics
Last Update : Tue Sep 29 09:39:04 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L01OCT98\10CC01A.D Vial: 1
Acq On : 1 Oct 98 8:32 am Operator:
Sample : CAL CK 50 PPB Inst : 5972-INST
Misc : Multiplr: 1.00
Quant Time: Oct 1 9:06 1998

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 16:20:26 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	17.72	168	3722247	50.00 ppb		0.02
30) 1,4-Difluorobenzene	18.94	114	4695350	50.00 ppb		0.02
48) Chlorobenzene-d5	23.38	117	4169356	50.00 ppb		0.04
61) 1,4-dichlorobenzene-d4	26.83	152	2289419	50.00 ppb		0.04
System Monitoring Compounds						**%Recovery**
2) Dibromofluoromethane	17.74	113	2249278	49.84 ppb		99.68%
31) Toluene-d8	21.17	98	4691228	49.98 ppb		99.96%
60) 4-bromofluorobenzene	25.08	95	2417679	48.31 ppb		96.63%
Target Compounds						**Qvalue**
3) dichlorodifluoromethane	7.23	85	1234290	23.75 ppb		99
4) chloromethane	8.10	50	976263	45.75 ppb		99
5) vinyl chloride	8.63	62	733069	40.41 ppb		99
6) bromomethane	10.15	94	280776	47.41 ppb		98
7) chloroethane	10.61	64	214587	47.46 ppb		98
8) trichlorofluoromethane	11.32	101	1271186	40.73 ppb		100
9) Methyliodide	13.46	142	1645605	42.40 ppb		97
10) 1,1-dichloroethene	12.98	96	548163	43.20 ppb		94
11) methylene chloride	14.36	84	1569431	74.23 ppb		98
12) trans-1,2-dichloroethene	14.87	96	1554998	51.20 ppb		96
13) Ethylether	12.35	74	216712	38.18 ppb		100
14) Acetone	13.35	43	261155	30.00 ppb		96
15) Carbondisulfide	13.57	76	1656484	39.50 ppb		100
16) Acrolein	17.07	55	999604	39.27 ppb		100
17) Acrylonitrile	15.07	52	319329	40.62 ppb		100
18) Diisopropylether	15.78	87	670394	23.36 ppb		84
19) Methyl-tert-butyl Ether (M	14.84	73	2222020	47.37 ppb	#	100
20) Vinylacetate	14.10	43	490244	66.23 ppb		100
21) 1,1-dichloroethane	15.85	63	2899947	45.95 ppb		99
22) 2,2-dichloropropane	16.89	77	1646307	53.33 ppb		95
23) cis-1,2-dichloroethene	16.94	96	1590976	49.65 ppb		93
24) bromochloromethane	17.38	128	971422	51.27 ppb		93
25) 2-Butanone (MEK)	16.98	72	158671	39.54 ppb	#	100
26) Tetrahydrofuran	17.42	72	132209	39.95 ppb	#	1
27) chloroform	17.46	83	2910066	47.28 ppb		96
28) 1,1,1-trichloroethane	17.76	97	2249437	48.15 ppb		85
29) Allyl chloride	13.57	76	1647703	39.86 ppb	#	99
32) 4-Methyl-2-pentanone (MIBK	20.97	43	1259347	40.30 ppb	#	79
33) 2-Chloroethyl Vinyl Ether	20.51	63	505666	43.82 ppb		100
34) carbon tetrachloride	17.97	117	2160702	52.06 ppb		94
35) 1,1-dichloropropene	18.00	75	2204067	53.94 ppb		88
36) benzene	18.36	78	4999127	49.15 ppb		97
37) 1,2-dichloroethane	18.48	62	1929832	45.33 ppb		91

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L01OCT98\10CC01A.D
Acq On : 1 Oct 98 8:32 am
Sample : CAL CK 50 PPB
Misc :
Quant Time: Oct 1 9:06 1998

Vial: 1
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 16:20:26 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	trichloroethene	19.35	95	1826300	47.05 ppb	#	67
39)	1,2-dichloropropane	19.79	63	1582759	47.79 ppb		79
40)	dibromomethane	19.98	93	1193850	46.45 ppb		96
41)	bromodichloromethane	20.16	83	2312664	47.02 ppb		97
42)	cis-1,3-dichloropropene	20.82	75	2176930	48.03 ppb		71
43)	toluene	21.27	92	2985752	47.27 ppb		100
44)	trans-1,3-dichloropropene	21.63	75	1670996	46.84 ppb		86
45)	1,1,2-trichloroethane	21.93	83	1055388	42.31 ppb	#	69
46)	1,2-Dibromoethane	22.78	107	1533276	44.36 ppb		100
47)	1,4-dichloro-2-butene	25.32	53	177036	45.93 ppb	#	9
49)	tetrachloroethene	22.07	166	2514173	43.30 ppb	#	81
50)	1,3-dichloropropane	22.21	76	1950718	44.25 ppb		98
51)	dibromochloromethane	22.53	129	1856385	47.30 ppb		97
52)	chlorobenzene	23.41	112	3764212	49.32 ppb		83
53)	1,1,1,2-tetrachloroethane	23.50	131	1736111	53.64 ppb		96
54)	ethylbenzene	23.45	91	5893067	48.35 ppb		99
5)	para & meta xylene	23.63	106	4501486	106.73 ppb	#	85
56)	ortho xylene	24.25	106	2291793	53.21 ppb		91
57)	styrene	24.26	104	3789994	54.39 ppb		100
58)	2-Hexanone (MBK)	22.18	43	1094328	39.46 ppb	#	66
59)	bromoform	24.67	173	1167570	43.84 ppb		97
62)	Isopropyl benzene	24.72	105	6309759	52.13 ppb	#	78
63)	bromobenzene	25.36	156	1899585	51.58 ppb	#	1
64)	1,1,2,2-tetrachloroethane	25.24	83	1653832	40.38 ppb	#	1
65)	1,2,3-trichloropropane	25.38	75	1685536	44.97 ppb	#	1
66)	n-propylbenzene	25.34	91	7548404	50.87 ppb		86
67)	2-chlorotoluene	25.59	91	5087251	50.95 ppb	#	85
68)	4-chlorotoluene	25.75	91	4451714	47.05 ppb	#	85
69)	1,3,5-trimethylbenzene	25.57	105	5217027	54.12 ppb	#	1
70)	tert-butylbenzene	26.07	119	4952289	48.06 ppb		100
71)	1,2,4-trimethylbenzene	26.16	105	5316062	52.51 ppb		76
72)	sec-butylbenzene	26.40	105	7176772	54.17 ppb		99
73)	1,3-dichlorobenzene	26.72	146	3108805	48.88 ppb		93
74)	p-isopropyltoluene	26.58	119	5964569	50.81 ppb	#	31
75)	1,4-dichlorobenzene	26.86	146	3289099	48.42 ppb	#	1
76)	1,2-dichlorobenzene	27.46	146	3005179	48.41 ppb	#	100
77)	n-butylbenzene	27.20	91	5747037	52.20 ppb	#	100
78)	1,2-dibromo-3-chloropropan	28.65	75	325111	51.03 ppb	#	1
79)	1,2,4-trichlorobenzene	29.92	180	2390273	46.41 ppb	#	100
80)	hexachlorobutadiene	30.03	225	1466752	46.67 ppb		98
81)	naphthalene	30.40	128	3979226	40.24 ppb		100
82)	1,2,3-trichlorobenzene	30.81	180	2177339	45.94 ppb		99
3)	hexachloroethane	27.80	201	663632	54.98 ppb	#	100
84)	2-methylnapthalene	32.49	142	2185989	35.11 ppb		97

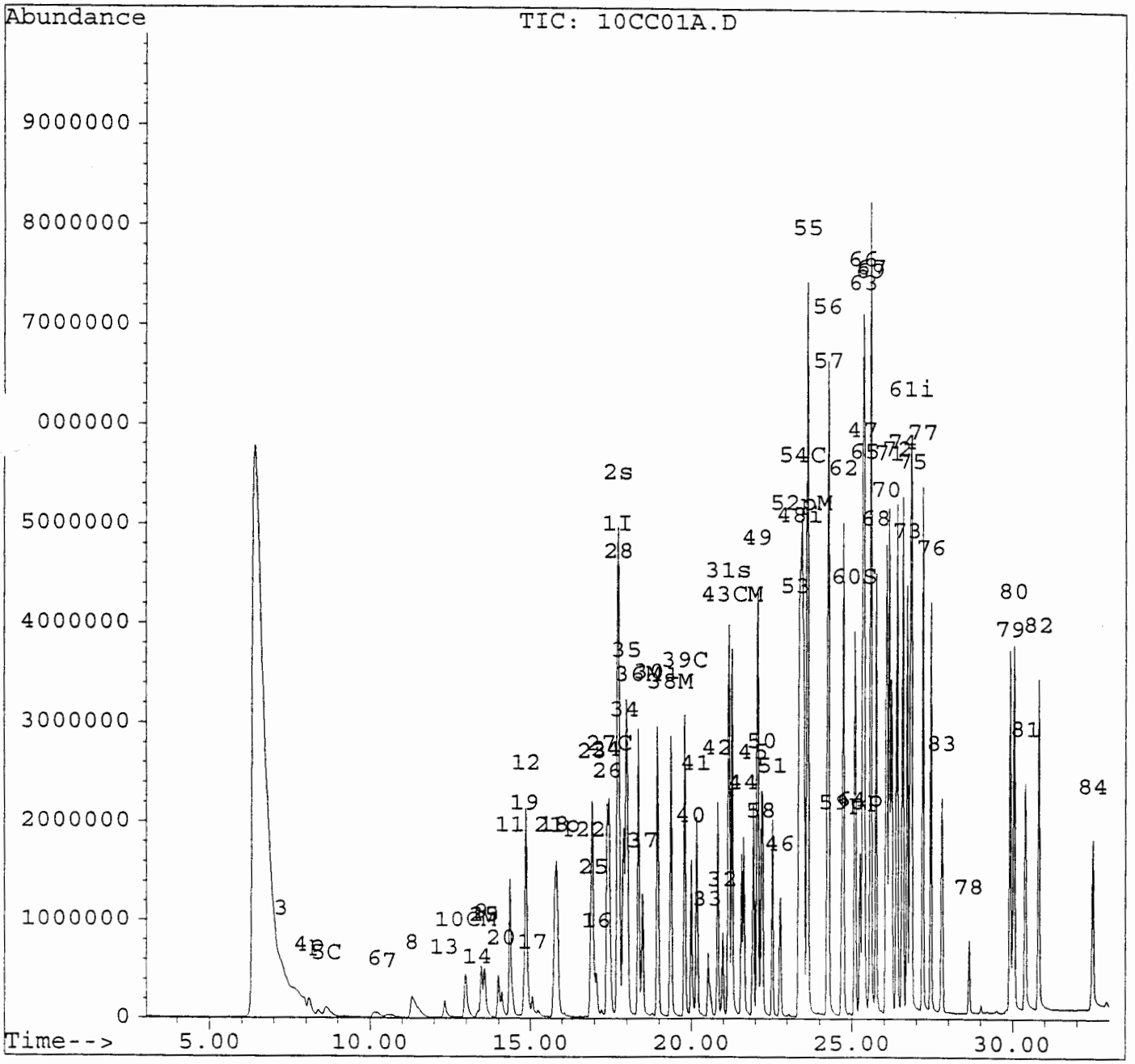
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L01OCT98\10CC01A.D
Acq On : 1 Oct 98 8:32 am
Sample : CAL CK 50 PPB
Misc :
Quant Time: Oct 1 9:06 1998

Vial: 1
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 16:20:26 1998
Response via : Multiple Level Calibration



Evaluate Continuing Calibration Report

Data File : L:\HPCHEM\1\DATA\L01OCT98\10CC01A.D Vial: 1
Acq On : 1 Oct 98 8:32 am Operator:
Sample : CAL CK 50 PPB Inst : 5972-INST
isc : Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 16:20:26 1998
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	110	0.02
2	s	Dibromofluoromethane	0.606	0.604	0.3	111	0.02
3		dichlorodifluoromethane	0.698	0.332	52.5#	60	0.04
4	p	chloromethane	0.287	0.262	8.5	135	0.04
5	C	vinyl chloride	0.244	0.197	19.2	106	0.00
6		bromomethane	0.080	0.075	5.2	130	0.05
7		chloroethane	0.061	0.058	5.1	122	0.05
8		trichlorofluoromethane	0.419	0.342	18.5	101	0.02
9		Methyliodide	0.521	0.442	15.2	103	0.02
10	CM	1,1-dichloroethene	0.170	0.147	13.6	108	0.02
11		methylene chloride	0.284	0.422	-48.5#	285#	0.02
12		trans-1,2-dichloroethene	0.408	0.418	-2.4	121	0.04
13		Ethylether	0.076	0.058	23.6#	94	0.02
1		Acetone	0.117	0.070	40.0#	80	0.02
		Carbondisulfide	0.563	0.445	21.0#	94	0.02
16		Acrolein	0.342	0.269	21.5#	87	0.02
17		Acrylonitrile	0.106	0.086	18.8	94	0.02
18		Diisopropylether	0.386	0.180	53.3#	53	0.02
19		Methyl-tert-butyl Ether (MT	0.630	0.597	5.3	111	0.02
20		Vinylacetate	0.099	0.132	-32.5#	156	0.04
21	p	1,1-dichloroethane	0.848	0.779	8.1	107	0.02
22		2,2-dichloropropane	0.415	0.442	-6.7	122	0.02
23		cis-1,2-dichloroethene	0.430	0.427	0.7	114	0.02
24		bromochloromethane	0.255	0.261	-2.5	116	0.02
25		2-Butanone (MEK)	0.054	0.043	20.9#	90	0.02
26		Tetrahydrofuran	0.044	0.036	20.1#	94	0.02
27	C	chloroform	0.827	0.782	5.4	110	0.02
28		1,1,1-trichloroethane	0.628	0.604	3.7	114	0.02
29		Allyl chloride	0.555	0.443	20.3#	95	0.02
30	i	1,4-Difluorobenzene	1.000	1.000	0.0	104	0.02
31	s	Toluene-d8	1.000	0.999	0.0	106	0.02
32		4-Methyl-2-pentanone (MIBK)	0.333	0.268	19.4	85	0.02
33		2-Chloroethyl Vinyl Ether	0.123	0.108	12.4	89	0.02
34		carbon tetrachloride	0.442	0.460	-4.1	109	0.02
35		1,1-dichloropropene	0.435	0.469	-7.9	119	0.02
36	M	benzene	1.083	1.065	1.7	110	0.02
37		1,2-dichloroethane	0.453	0.411	9.3	101	0.02
38	M	trichloroethene	0.413	0.389	5.9	107	0.02
3		1,2-dichloropropane	0.353	0.337	4.4	107	0.02
4		dibromomethane	0.274	0.254	7.1	102	0.02
41		bromodichloromethane	0.524	0.493	6.0	102	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : L:\HPCHEM\1\DATA\L01OCT98\10CC01A.D Vial: 1
Acq On : 1 Oct 98 8:32 am Operator:
Sample : CAL CK 50 PPB Inst : 5972-INST
Misc : Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 16:20:26 1998
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42		cis-1,3-dichloropropene	0.483	0.464	3.9	102	0.02
43	CM	toluene	0.673	0.636	5.5	107	0.04
44		trans-1,3-dichloropropene	0.380	0.356	6.3	98	0.02
45		1,1,2-trichloroethane	0.266	0.225	15.4	92	0.02
46		1,2-Dibromoethane	0.368	0.327	11.3	94	0.04
47		1,4-dichloro-2-butene	0.041	0.038	8.1	93	0.04
48	i	Chlorobenzene-d5	1.000	1.000	0.0	102	0.04
49		tetrachloroethene	0.696	0.603	13.4	100	0.04
50		1,3-dichloropropane	0.529	0.468	11.5	95	0.04
51		dibromochloromethane	0.471	0.445	5.4	94	0.04
52	pM	chlorobenzene	0.915	0.903	1.4	107	0.04
53		1,1,1,2-tetrachloroethane	0.388	0.416	-7.3	108	0.02
5		ethylbenzene	1.462	1.413	3.3	106	0.02
5		para & meta xylene	0.506	0.540	-6.7	116	0.04
56		ortho xylene	0.517	0.550	-6.4	113	0.04
57		styrene	0.836	0.909	-8.8	115	0.02
58		2-Hexanone (MBK)	0.333	0.262	21.1#	79	0.04
59	p	bromoform	0.319	0.280	12.3	84	0.04
60	S	4-bromofluorobenzene	0.600	0.580	3.4	101	0.07
61	i	1,4-dichlorobenzene-d4	1.000	1.000	0.0	100	0.04
62		Isopropyl benzene	2.643	2.756	-4.3	110	0.04
63		bromobenzene	0.804	0.830	-3.2	107	0.02
64	p	1,1,2,2-tetrachloroethane	0.894	0.722	19.2	84	0.02
65		1,2,3-trichloropropane	0.819	0.736	10.1	95	0.02
66		n-propylbenzene	3.241	3.297	-1.7	111	0.05
67		2-chlorotoluene	2.181	2.222	-1.9	109	0.04
68		4-chlorotoluene	2.066	1.944	5.9	101	0.04
69		1,3,5-trimethylbenzene	2.105	2.279	-8.2	114	0.05
70		tert-butylbenzene	2.250	2.163	3.9	108	0.07
71		1,2,4-trimethylbenzene	2.211	2.322	-5.0	113	0.04
72		sec-butylbenzene	2.894	3.135	-8.3	113	0.07
73		1,3-dichlorobenzene	1.389	1.358	2.2	102	0.04
74		p-isopropyltoluene	2.564	2.605	-1.6	104	0.04
75		1,4-dichlorobenzene	1.483	1.437	3.2	103	0.04
76		1,2-dichlorobenzene	1.356	1.313	3.2	100	0.04
77		n-butylbenzene	2.404	2.510	-4.4	108	0.04
78		1,2-dibromo-3-chloropropane	0.139	0.142	-2.1	84	0.04
7		1,2,4-trichlorobenzene	1.125	1.044	7.2	94	0.05
8		hexachlorobutadiene	0.686	0.641	6.7	92	0.04
81		naphthalene	2.160	1.738	19.5	81	0.05

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : L:\HPCHEM\1\DATA\L01OCT98\10CC01A.D Vial: 1
Acq On : 1 Oct 98 8:32 am Operator:
Sample : CAL CK 50 PPB Inst : 5972-INST
isc : Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 16:20:26 1998
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
82	1,2,3-trichlorobenzene	1.035	0.951	8.1	93	0.04
83	hexachloroethane	0.264	0.290	-10.0	87	0.04
84	2-methylnapthalene	1.360	0.955	29.8#	73	0.05

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\10CC02A.D
Acq On : 2 Oct 98 9:32 am
Sample : CAL GK 50 PPB
Misc :
Quant Time: Oct 2 10:06 1998

Vial: 1
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	17.74	168	3860641	50.00 ppb	0.03
30) 1,4-Difluorobenzene	18.96	114	4965062	50.00 ppb	0.03
48) Chlorobenzene-d5	23.38	117	4617657	50.00 ppb	0.03
61) 1,4-dichlorobenzene-d4	26.84	152	2632764	50.00 ppb	0.05
System Monitoring Compounds					**%Recovery**
2) Dibromofluoromethane	17.75	113	2494998	53.30 ppb	106.61%
31) Toluene-d8	21.18	98	5073351	51.11 ppb	102.23%
60) 4-bromofluorobenzene	25.09	95	2739359	49.43 ppb	98.85%
Target Compounds					**Qvalue**
3) dichlorodifluoromethane	7.23	85	1059400	19.66 ppb	98
4) chloromethane	8.10	50	1029577	46.52 ppb	99
5) vinyl chloride	8.63	62	892332	47.42 ppb	100
6) bromomethane	10.15	94	305865	49.79 ppb	98
7) chloroethane	10.57	64	233470	49.79 ppb	95
8) trichlorofluoromethane	11.33	101	1606109	49.61 ppb	100
9) Methyliodide	13.47	142	2089001	51.90 ppb	98
10) 1,1-dichloroethene	13.00	96	693895	52.72 ppb	90
11) methylene chloride	14.38	84	1644702	75.00 ppb	93
12) trans-1,2-dichloroethene	14.87	96	1636392	51.95 ppb	97
13) Ethylether	12.34	74	276186	46.91 ppb	100
14) Acetone	13.37	43	315022	34.89 ppb	93
15) Carbondisulfide	13.58	76	2107095	48.44 ppb	99
16) Acrolein	17.06	55	1076475	40.78 ppb	100
17) Acrylonitrile	15.08	52	339989	41.70 ppb	100
18) Diisopropylether	15.79	87	690941	23.21 ppb	71
19) Methyl-tert-butyl Ether (M	14.85	73	2221822	45.67 ppb #	100
20) Vinylacetate	14.09	43	271174	35.32 ppb	100
21) 1,1-dichloroethane	15.84	63	3171372	48.45 ppb	98
22) 2,2-dichloropropane	16.90	77	1698472	53.05 ppb	95
23) cis-1,2-dichloroethene	16.94	96	1682694	50.63 ppb #	85
24) bromochloromethane	17.38	128	982659	50.00 ppb #	76
25) 2-Butanone (MEK)	16.99	72	165604	39.79 ppb #	100
26) Tetrahydrofuran	17.44	72	138510	40.36 ppb #	1
27) chloroform	17.47	83	3161190	49.52 ppb	95
28) 1,1,1-trichloroethane	17.75	97	2483866	51.26 ppb #	68
29) Allyl chloride	13.58	76	2092232	48.80 ppb #	98
32) 4-Methyl-2-pentanone (MIBK	20.99	43	1325901	40.12 ppb #	78
33) 2-Chloroethyl Vinyl Ether	20.53	63	556500	45.61 ppb	100
34) carbon tetrachloride	17.98	117	2307851	52.59 ppb	94
35) 1,1-dichloropropene	18.02	75	2363435	54.70 ppb	88
6) benzene	18.37	78	5328261	49.54 ppb	96
7) 1,2-dichloroethane	18.50	62	2124849	47.20 ppb	92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\10CC02A.D
Acq On : 2 Oct 98 9:32 am
Sample : CAL CK 50 PPB
Misc :
Quant Time: Oct 2 10:06 1998

Vial: 1
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	trichloroethene	19.36	95	1985963	48.39 ppb	#	69
39)	1,2-dichloropropane	19.80	63	1777067	50.74 ppb		79
40)	dibromomethane	20.00	93	1281543	47.15 ppb		95
41)	bromodichloromethane	20.18	83	2496581	48.00 ppb		97
42)	cis-1,3-dichloropropene	20.83	75	2332099	48.66 ppb		71
43)	toluene	21.27	92	3312799	49.60 ppb		100
44)	trans-1,3-dichloropropene	21.64	75	1827060	48.43 ppb		87
45)	1,1,2-trichloroethane	21.94	83	1162366	44.07 ppb	#	68
46)	1,2-Dibromoethane	22.78	107	1642589	44.94 ppb		99
47)	1,4-dichloro-2-butene	25.34	53	200439	49.18 ppb	#	9
49)	tetrachloroethene	22.09	166	2696461	41.93 ppb	#	80
50)	1,3-dichloropropane	22.21	76	2174350	44.53 ppb		98
51)	dibromochloromethane	22.55	129	1963050	45.16 ppb		97
52)	chlorobenzene	23.43	112	4230467	50.05 ppb		83
53)	1,1,1,2-tetrachloroethane	23.52	131	1847289	51.53 ppb		96
54)	ethylbenzene	23.47	91	6634259	49.15 ppb		100
5)	para & meta xylene	23.62	106	5037967	107.85 ppb		88
56)	ortho xylene	24.24	106	2579702	54.08 ppb		96
57)	styrene	24.28	104	4266221	55.28 ppb		98
58)	2-Hexanone (MBK)	22.17	43	1178265	38.36 ppb	#	67
59)	bromoform	24.69	173	1225093	41.53 ppb		96
62)	Isopropyl benzene	24.74	105	7014335	50.40 ppb	#	77
63)	bromobenzene	25.37	156	2072134	48.93 ppb	#	1
64)	1,1,2,2-tetrachloroethane	25.25	83	1824728	38.75 ppb	#	1
65)	1,2,3-trichloropropane	25.39	75	1870619	43.40 ppb	#	1
66)	n-propylbenzene	25.34	91	8551120	50.11 ppb		82
67)	2-chlorotoluene	25.60	91	5667690	49.36 ppb	#	85
68)	4-chlorotoluene	25.76	91	4950227	45.49 ppb	#	85
69)	1,3,5-trimethylbenzene	25.57	105	5733919	51.72 ppb	#	1
70)	tert-butylbenzene	26.08	119	5340992	45.07 ppb		99
71)	1,2,4-trimethylbenzene	26.17	105	5914168	50.80 ppb		75
72)	sec-butylbenzene	26.42	105	8127757	53.35 ppb		99
73)	1,3-dichlorobenzene	26.74	146	3465780	47.39 ppb		93
74)	p-isopropyltoluene	26.60	119	6616875	49.01 ppb	#	31
75)	1,4-dichlorobenzene	26.88	146	3661562	46.87 ppb	#	1
76)	1,2-dichlorobenzene	27.48	146	3291342	46.10 ppb	#	100
77)	n-butylbenzene	27.21	91	6561059	51.82 ppb	#	100
78)	1,2-dibromo-3-chloropropan	28.66	75	335230	45.76 ppb	#	1
79)	1,2,4-trichlorobenzene	29.92	180	2619491	44.23 ppb	#	100
80)	hexachlorobutadiene	30.04	225	1616128	44.71 ppb		98
81)	naphthalene	30.41	128	4317412	37.97 ppb		100
82)	1,2,3-trichlorobenzene	30.82	180	2409491	44.21 ppb		100
3)	hexachloroethane	27.82	201	709799	51.14 ppb	#	100
84)	2-methylnapthalene	32.50	142	2348887	32.80 ppb		97

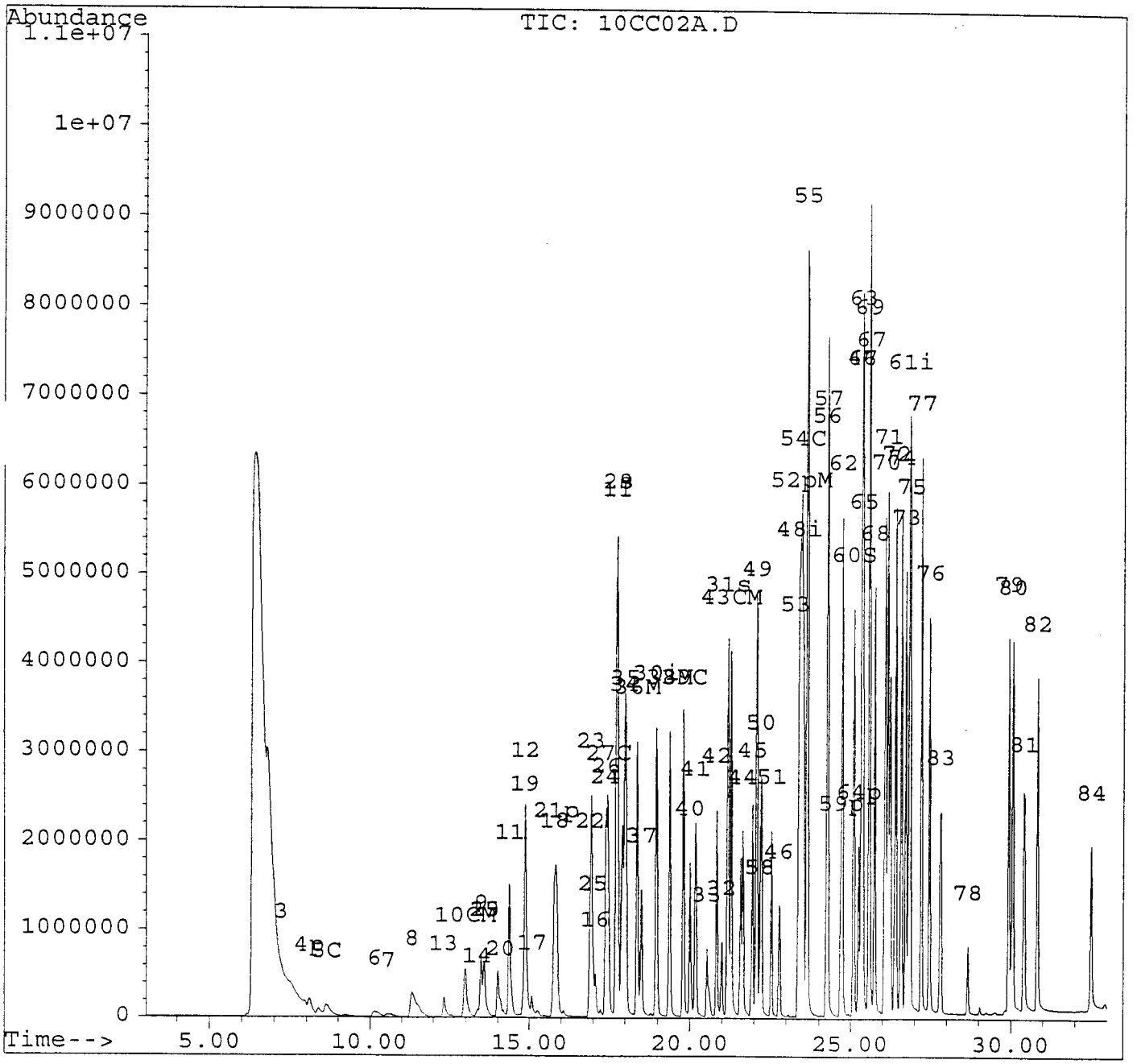
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\10CC02A.D
Acq On : 2 Oct 98 9:32 am
Sample : CAL GK 50 PPB
Misc :
Quant Time: Oct 2 10:06 1998

Vial: 1
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration



Evaluate Continuing Calibration Report

Data File : L:\HPCHEM\1\DATA\L02OCT98\10CC02A.D Vial: 1
Acq On : 2 Oct 98 9:32 am Operator:
Sample : CAL CK-50 PPB Inst : 5972-INST
isc : Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	114	0.03
2	s	Dibromofluoromethane	0.606	0.646	-6.6	123	0.03
3		dichlorodifluoromethane	0.698	0.274	60.7#	52	0.03
4	p	chloromethane	0.287	0.267	7.0	142	0.03
5	C	vinyl chloride	0.244	0.231	5.2	129	0.00
6		bromomethane	0.080	0.079	0.4	142	0.05
7		chloroethane	0.061	0.060	0.4	133	0.02
8		trichlorofluoromethane	0.419	0.416	0.8	127	0.03
9		Methyliodide	0.521	0.541	-3.8	130	0.03
10	CM	1,1-dichloroethene	0.170	0.180	-5.4	136	0.03
11		methylene chloride	0.284	0.426	-50.0#	299#	0.03
12		trans-1,2-dichloroethene	0.408	0.424	-3.9	127	0.03
13		Ethylether	0.076	0.072	6.2	120	0.02
14		Acetone	0.117	0.082	30.2#	97	0.03
[illegible]		Carbondisulfide	0.563	0.546	3.1	120	0.03
16		Acrolein	0.342	0.279	18.4	94	0.02
17		Acrylonitrile	0.106	0.088	16.6	100	0.03
18		Diisopropylether	0.386	0.179	53.6#	54	0.03
19		Methyl-tert-butyl Ether (MT	0.630	0.576	8.7	111	0.03
20		Vinylacetate	0.099	0.070	29.4#	86	0.03
21	p	1,1-dichloroethane	0.848	0.821	3.1	117	0.02
22		2,2-dichloropropane	0.415	0.440	-6.1	126	0.03
23		cis-1,2-dichloroethene	0.430	0.436	-1.3	120	0.02
24		bromochloromethane	0.255	0.255	-0.0	118	0.02
25		2-Butanone (MEK)	0.054	0.043	20.4#	94	0.03
26		Tetrahydrofuran	0.044	0.036	19.3	99	0.03
27	C	chloroform	0.827	0.819	1.0	120	0.03
28		1,1,1-trichloroethane	0.628	0.643	-2.5	126	0.02
29		Allyl chloride	0.555	0.542	2.4	121	0.03
30	i	1,4-Difluorobenzene	1.000	1.000	0.0	110	0.03
31	s	Toluene-d8	1.000	1.022	-2.2	114	0.03
32		4-Methyl-2-pentanone (MIBK)	0.333	0.267	19.8	90	0.03
33		2-Chloroethyl Vinyl Ether	0.123	0.112	8.8	98	0.03
34		carbon tetrachloride	0.442	0.465	-5.2	116	0.03
35		1,1-dichloropropene	0.435	0.476	-9.4	127	0.03
36	M	benzene	1.083	1.073	0.9	117	0.03
37		1,2-dichloroethane	0.453	0.428	5.6	111	0.03
38	M	trichloroethene	0.413	0.400	3.2	117	0.03
39	C	1,2-dichloropropane	0.353	0.358	-1.5	120	0.03
40		dibromomethane	0.274	0.258	5.7	109	0.03
41		bromodichloromethane	0.524	0.503	4.0	110	0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : L:\HPCHEM\1\DATA\L02OCT98\10CC02A.D Vial: 1
Acq On : 2 Oct 98 9:32 am Operator:
Sample : CAL CK.50 PPB Inst : 5972-INST
Misc : Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42		cis-1,3-dichloropropene	0.483	0.470	2.7	109	0.03
43	CM	toluene	0.673	0.667	0.8	119	0.03
44		trans-1,3-dichloropropene	0.380	0.368	3.1	107	0.03
45		1,1,2-trichloroethane	0.266	0.234	11.9	101	0.03
46		1,2-Dibromoethane	0.368	0.331	10.1	101	0.03
47		1,4-dichloro-2-butene	0.041	0.040	1.6	105	0.05
48	i	Chlorobenzene-d5	1.000	1.000	0.0	113	0.03
49		tetrachloroethene	0.696	0.584	16.1	107	0.05
50		1,3-dichloropropane	0.529	0.471	10.9	106	0.03
51		dibromochloromethane	0.471	0.425	9.7	100	0.05
52	pM	chlorobenzene	0.915	0.916	-0.1	120	0.05
53		1,1,1,2-tetrachloroethane	0.388	0.400	-3.1	115	0.03
54	C	ethylbenzene	1.462	1.437	1.7	119	0.03
5		para & meta xylene	0.506	0.546	-7.9	129	0.03
5		ortho xylene	0.517	0.559	-8.2	127	0.03
57		styrene	0.836	0.924	-10.6	129	0.03
58		2-Hexanone (MBK)	0.333	0.255	23.3#	86	0.03
59	p	bromoform	0.319	0.265	16.9	88	0.05
60	S	4-bromofluorobenzene	0.600	0.593	1.1	114	0.09
61	i	1,4-dichlorobenzene-d4	1.000	1.000	0.0	115	0.05
62		Isopropyl benzene	2.643	2.664	-0.8	123	0.05
63		bromobenzene	0.804	0.787	2.1	117	0.03
64	p	1,1,2,2-tetrachloroethane	0.894	0.693	22.5#	92	0.03
65		1,2,3-trichloropropane	0.819	0.711	13.2	105	0.03
66		n-propylbenzene	3.241	3.248	-0.2	126	0.05
67		2-chlorotoluene	2.181	2.153	1.3	122	0.05
68		4-chlorotoluene	2.066	1.880	9.0	113	0.05
69		1,3,5-trimethylbenzene	2.105	2.178	-3.4	126	0.05
70		tert-butylbenzene	2.250	2.029	9.9	117	0.09
71		1,2,4-trimethylbenzene	2.211	2.246	-1.6	125	0.05
72		sec-butylbenzene	2.894	3.087	-6.7	128	0.09
73		1,3-dichlorobenzene	1.389	1.316	5.2	114	0.05
74		p-isopropyltoluene	2.564	2.513	2.0	115	0.05
75		1,4-dichlorobenzene	1.483	1.391	6.3	115	0.05
76		1,2-dichlorobenzene	1.356	1.250	7.8	110	0.05
77		n-butylbenzene	2.404	2.492	-3.6	123	0.05
78		1,2-dibromo-3-chloropropane	0.139	0.127	8.5	87	0.05
79		1,2,4-trichlorobenzene	1.125	0.995	11.5	103	0.05
8		hexachlorobutadiene	0.686	0.614	10.6	101	0.05
3		naphthalene	2.160	1.640	24.1#	88	0.07

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : L:\HPCHEM\1\DATA\L02OCT98\10CC02A.D Vial: 1
Acq On : 2 Oct 98 9:32 am Operator:
Sample : CAL CK 50 PPB Inst : 5972-INST
Misc : Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
82	1,2,3-trichlorobenzene	1.035	0.915	11.6	103	0.05
83	hexachloroethane	0.264	0.270	-2.3	93	0.05
84	2-methylnapthalene	1.360	0.892	34.4#	78	0.07

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\10CC02A.D
Acq On : 2 Oct 98 4:19 pm
Sample : ccal 50 ppb
Misc :
Quant Time: Oct 2 16:58 1998

Vial: 1
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	20.49	168	1948279	50.00 ppb		-0.01
30) 1,4-Difluorobenzene	21.99	114	3017825	50.00 ppb		-0.01
48) Chlorobenzene-d5	27.58	117	2791902	50.00 ppb		-0.03
61) 1,4-dichlorobenzene-d4	32.14	152	1617460	50.00 ppb		0.00
System Monitoring Compounds						**%Recovery**
2) Dibromofluoromethane	20.53	113	1138340	48.89 ppb		97.78%
31) Toluene-d8	24.80	98	3150906	48.80 ppb		97.61%
60) 4-bromofluorobenzene	29.80	95	1408220	49.14 ppb		98.29%
Target Compounds						**Qvalue**
3) dichlorodifluoromethane	9.65	85	491858	19.68 ppb		97
4) chloromethane	10.61	50	1321783	19.29 ppb		96
5) vinyl chloride	11.17	62	1548177	50.15 ppb		100
6) bromomethane	12.62	94	1019408	49.12 ppb		98
7) chloroethane	13.03	64	912407	53.00 ppb		96
) trichlorofluoromethane	13.97	101	1531752	48.79 ppb		100
9) Methyliodide	16.02	142	1400725	48.32 ppb		94
10) 1,1-dichloroethene	15.56	96	778681	46.56 ppb	#	86
11) methylene chloride	16.80	84	925737	30.85 ppb		100
12) trans-1,2-dichloroethene	17.47	96	928437	49.07 ppb		94
13) Ethylether	14.89	74	586855	52.11 ppb		100
14) Acetone	15.70	43	294155	33.03 ppb		91
15) Carbondisulfide	16.24	76	2863200	41.92 ppb		99
16) Acrolein	19.76	55	707779	44.74 ppb		100
17) Acrylonitrile	17.36	52	220992	41.83 ppb		100
18) Diisopropylether	18.47	87	465325	23.52 ppb		67
19) Methyl-tert-butyl Ether (M	17.46	73	2008852	46.78 ppb		92
20) Vinylacetate	18.47	43	1127784	21.59 ppb		100
21) 1,1-dichloroethane	18.41	63	1885397	44.53 ppb		98
22) 2,2-dichloropropane	19.64	77	1237305	47.31 ppb		93
23) cis-1,2-dichloroethene	19.62	96	960954	49.01 ppb		95
24) bromochloromethane	20.12	128	459923	48.60 ppb	#	75
25) 2-Butanone (MEK)	19.59	72	95345	43.73 ppb		98
26) Tetrahydrofuran	20.24	72	81725	43.49 ppb		78
27) chloroform	20.21	83	1503736	45.48 ppb		97
28) 1,1,1-trichloroethane	20.67	97	1182599	44.36 ppb		92
29) Allyl chloride	16.24	76	2863200	41.92 ppb	#	99
32) 4-Methyl-2-pentanone (MIBK	24.43	43	798970	44.94 ppb		96
33) 2-Chloroethyl Vinyl Ether	23.87	63	464648	50.67 ppb		100
34) carbon tetrachloride	21.02	117	942025	46.59 ppb		99
35) 1,1-dichloropropene	20.97	75	1341336	52.76 ppb		98
) benzene	21.40	78	3733697	48.20 ppb		97
7) 1,2-dichloroethane	21.38	62	955039	42.86 ppb		90

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\10CC02A.D
Acq On : 2 Oct 98 4:19 pm
Sample : ccal 50 ppb
Misc :
Quant Time: Oct 2 16:58 1998

Vial: 1
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	trichloroethene	22.56	95	1060598	48.24	ppb		98
39)	1,2-dichloropropane	22.99	63	1184378	48.57	ppbL		95
40)	dibromomethane	23.24	93	583958	46.92	ppb	#	75
41)	bromodichloromethane	23.46	83	1169254	47.55	ppb		99
42)	cis-1,3-dichloropropene	24.26	75	1388904	48.65	ppb		98
43)	toluene	24.94	92	2034945	47.30	ppb		99
44)	trans-1,3-dichloropropene	25.23	75	1151412	49.08	ppb		94
45)	1,1,2-trichloroethane	25.62	83	693067	47.41	ppb		94
46)	1,2-Dibromoethane	26.74	107	833148	50.73	ppb	#	98
47)	1,4-dichloro-2-butene	30.05	53	135960	47.61	ppb	#	7
49)	tetrachloroethene	26.02	166	1573104	49.58	ppb		90
50)	1,3-dichloropropane	25.96	76	1507334	51.19	ppb		98
51)	dibromochloromethane	26.46	129	894964	51.18	ppb		99
52)	chlorobenzene	27.64	112	2527720	52.19	ppb		95
53)	1,1,1,2-tetrachloroethane	27.74	131	951655	54.82	ppb	#	79
54)	ethylbenzene	27.74	91	4574228	56.24	ppb		98
5)	para & meta xylene	27.96	106	3517860	113.80	ppb	#	84
56)	ortho xylene	28.76	106	1707981	55.17	ppb	#	85
57)	styrene	28.77	104	2900082	59.64	ppb		90
58)	2-Hexanone (MBK)	25.96	43	838547	51.50	ppb		97
59)	bromoform	29.24	173	492539	48.02	ppb		99
62)	Isopropyl benzene	29.43	105	4490313	50.14	ppb		95
63)	bromobenzene	30.20	156	1085765	47.16	ppb	#	78
64)	1,1,2,2-tetrachloroethane	29.96	83	981122	38.62	ppb		95
65)	1,2,3-trichloropropane	30.11	75	1013993	37.57	ppb		89
66)	n-propylbenzene	30.24	91	6042800	49.55	ppb		99
67)	2-chlorotoluene	30.52	91	3803629	49.19	ppb		97
68)	4-chlorotoluene	30.71	91	3067997	48.01	ppb		93
69)	1,3,5-trimethylbenzene	30.53	105	3729687	49.45	ppb		93
70)	tert-butylbenzene	31.23	119	3514070	46.02	ppb		88
71)	1,2,4-trimethylbenzene	31.32	105	3814281	50.67	ppb		92
72)	sec-butylbenzene	31.67	105	5631665	52.46	ppb		97
73)	1,3-dichlorobenzene	32.02	146	2179647	50.75	ppb		98
74)	p-isopropyltoluene	31.91	119	4438409	49.80	ppb		95
75)	1,4-dichlorobenzene	32.18	146	2277467	51.15	ppb		98
76)	1,2-dichlorobenzene	32.97	146	2211526	49.86	ppb		98
77)	n-butylbenzene	32.74	91	5011466	57.86	ppb		93
78)	1,2-dibromo-3-chloropropan	34.53	75	169434	42.94	ppb		97
79)	1,2,4-trichlorobenzene	36.49	180	1125129	79.28	ppb		99
80)	hexachlorobutadiene	36.82	225	804957	55.91	ppb		96
81)	naphthalene	37.17	128	1903941	67.49	ppb		100
82)	1,2,3-trichlorobenzene	37.82	180	745569	79.73	ppb		96
3)	hexachloroethane	33.53	201	417541	59.01	ug/l	#	100

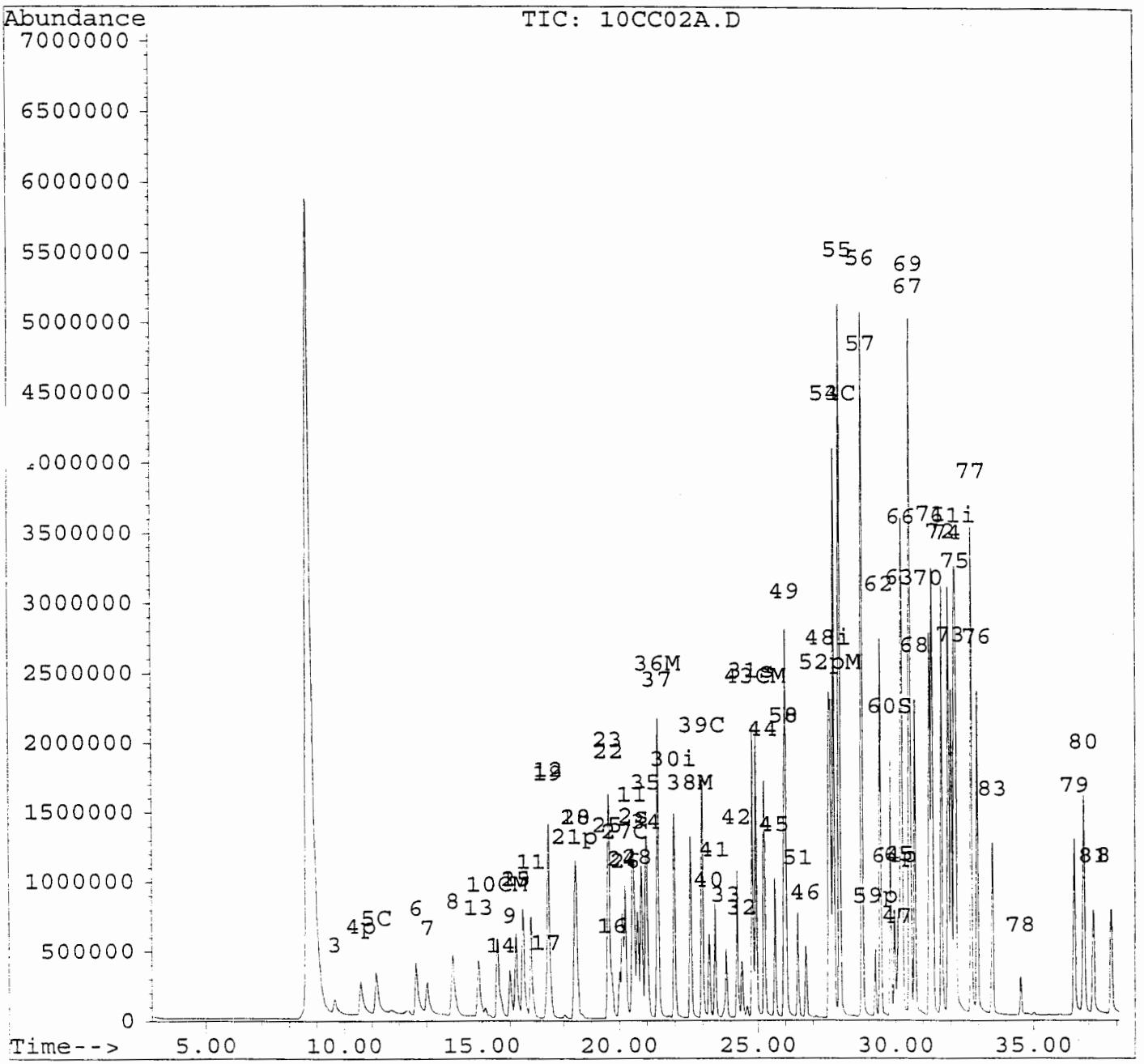
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\10CC02A.D
Acq On : 2 Oct 98 4:19 pm
Sample : ccal 50 ppb
Misc :
Quant Time: Oct 2 16:58 1998

Vial: 1
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration



Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\10CC02A.D Vial: 1
Acq On : 2 Oct 98 4:19 pm Operator: pj
Sample : ccal 50 ppb Inst : 5972-INST
Misc : Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	147	-0.01
2	s	Dibromofluoromethane	0.598	0.584	2.2	143	-0.03
3		dichlorodifluoromethane	0.641	0.252	60.6#	59	0.02
4	p	chloromethane	1.759	0.678	61.4#	121	0.02
5	C	vinyl chloride	0.792	0.795	-0.3	144	0.02
6		bromomethane	0.533	0.523	1.8	170	0.02
7		chloroethane	0.442	0.468	-6.0	161	0.03
8		trichlorofluoromethane	0.806	0.786	2.4	151	0.02
9		Methyliodide	0.744	0.719	3.4	153	0.00
10	CM	1,1-dichloroethene	0.429	0.400	6.9	141	0.00
11		methylene chloride	0.770	0.475	38.3#	139	0.00
12		trans-1,2-dichloroethene	0.486	0.477	1.9	150	0.00
13		Ethylether	0.289	0.301	-4.2	161	0.00
14		Acetone	0.229	0.151	33.9#	120	0.00
[illegible]		Carbondisulfide	1.753	1.470	16.2	127	0.00
1[illegible]		Acrolein	0.406	0.363	10.5	132	0.00
17		Acrylonitrile	0.136	0.113	16.3	131	0.00
18		Diisopropylether	0.508	0.239	53.0#	66	0.00
19		Methyl-tert-butyl Ether (MT	1.102	1.031	6.4	134	0.00
20		Vinylacetate	1.341	0.579	56.8#	64	0.00
21	p	1,1-dichloroethane	1.087	0.968	10.9	135	0.00
22		2,2-dichloropropane	0.671	0.635	5.4	144	-0.01
23		cis-1,2-dichloroethene	0.503	0.493	2.0	145	-0.01
24		bromochloromethane	0.243	0.236	2.8	146	-0.01
25		2-Butanone (MEK)	0.056	0.049	12.5	142	-0.01
26		Tetrahydrofuran	0.048	0.042	13.0	127	-0.01
27	C	chloroform	0.849	0.772	9.0	137	-0.01
28		1,1,1-trichloroethane	0.684	0.607	11.3	132	-0.01
29		Allyl chloride	1.753	1.470	16.2	127	0.00
30	i	1,4-Difluorobenzene	1.000	1.000	0.0	140	-0.01
31	s	Toluene-d8	1.070	1.044	2.4	133	-0.03
32		4-Methyl-2-pentanone (MIBK)	0.295	0.265	10.1	121	-0.03
33		2-Chloroethyl Vinyl Ether	0.152	0.154	-1.3	123	-0.03
34		carbon tetrachloride	0.335	0.312	6.8	127	-0.03
35		1,1-dichloropropene	0.421	0.444	-5.5	148	-0.01
36	M	benzene	1.283	1.237	3.6	140	-0.01
37		1,2-dichloroethane	0.369	0.316	14.3	122	-0.01
38	M	trichloroethene	0.364	0.351	3.5	140	-0.03
39	C	1,2-dichloropropane	0.404	0.392	2.9	137	-0.03
[illegible]		dibromomethane	0.206	0.194	6.2	135	-0.03
4[illegible]		bromodichloromethane	0.407	0.387	4.9	132	-0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\10CC02A.D Vial: 1
Acq On : 2 Oct 98 4:19 pm Operator: pj
Sample : ccal 50 ppb Inst : 5972-INST
Misc : Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42		cis-1,3-dichloropropene	0.473	0.460	2.7	128	-0.03
43	CM	toluene	0.713	0.674	5.4	130	-0.03
44		trans-1,3-dichloropropene	0.389	0.382	1.8	127	-0.03
45		1,1,2-trichloroethane	0.242	0.230	5.2	128	-0.03
46		1,2-Dibromoethane	0.272	0.276	-1.5	131	-0.03
47		1,4-dichloro-2-butene	0.047	0.045	4.8	112	-0.01
48	i	Chlorobenzene-d5	1.000	1.000	0.0	128	-0.03
49		tetrachloroethene	0.568	0.563	0.8	136	-0.03
50		1,3-dichloropropane	0.527	0.540	-2.4	134	-0.03
51		dibromochloromethane	0.313	0.321	-2.4	128	-0.03
52	pM	chlorobenzene	0.867	0.905	-4.4	137	-0.03
53		1,1,1,2-tetrachloroethane	0.311	0.341	-9.6	141	-0.01
54	C	ethylbenzene	1.457	1.638	-12.5	138	-0.03
[illegible]		para & meta xylene	0.554	0.630	-13.8	140	-0.03
5[illegible]		ortho xylene	0.554	0.612	-10.3	135	-0.03
57		styrene	0.871	1.039	-19.3	140	-0.01
58		2-Hexanone (MBK)	0.292	0.300	-3.0	126	-0.03
59	p	bromoform	0.184	0.176	4.0	116	-0.01
60	S	4-bromofluorobenzene	0.513	0.504	1.7	120	-0.01
61	i	1,4-dichlorobenzene-d4	1.000	1.000	0.0	135	0.00
62		Isopropyl benzene	2.769	2.776	-0.3	135	-0.03
63		bromobenzene	0.712	0.671	5.7	134	-0.01
64	p	1,1,2,2-tetrachloroethane	0.785	0.607	22.8#	114	-0.01
65		1,2,3-trichloropropane	0.834	0.627	24.9#	112	-0.01
66		n-propylbenzene	3.770	3.736	0.9	134	-0.01
67		2-chlorotoluene	2.390	2.352	1.6	136	-0.01
68		4-chlorotoluene	1.975	1.897	4.0	129	-0.01
69		1,3,5-trimethylbenzene	2.332	2.306	1.1	133	-0.01
70		tert-butylbenzene	2.360	2.173	8.0	127	-0.01
71		1,2,4-trimethylbenzene	2.327	2.358	-1.3	133	-0.01
72		sec-butylbenzene	3.319	3.482	-4.9	141	-0.01
73		1,3-dichlorobenzene	1.328	1.348	-1.5	140	0.00
74		p-isopropyltoluene	2.755	2.744	0.4	129	0.00
75		1,4-dichlorobenzene	1.376	1.408	-2.3	143	0.00
76		1,2-dichlorobenzene	1.371	1.367	0.3	135	0.00
77		n-butylbenzene	2.678	3.098	-15.7	143	0.00
78		1,2-dibromo-3-chloropropane	0.122	0.105	14.1	113	0.02
79		1,2,4-trichlorobenzene	0.439	0.696	-58.6#	126	0.03
8[illegible]		hexachlorobutadiene	0.445	0.498	-11.8	141	0.02
8[illegible]		naphthalene	0.872	1.177	-35.0#	109	0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\10CC02A.D Vial: 1
Acq On : 2 Oct 98 4:19 pm Operator: pj
Sample : ccal 50 ppb Inst : 5972-INST
Misc : Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
82	1,2,3-trichlorobenzene	0.289	0.461	-59.5#	117	0.03
83	hexachloroethane	0.219	0.258	-18.0	132	0.00
84	2-methylnapthalene	0.022	0.000	100.0#	0#	-40.45#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : L:\HPCHEM\1\DATA\L05OCT98\10CC05A.D
Acq On : 5 Oct 98 2:32 pm
Sample : CAL CK 50 PPB
Misc :
Quant Time: Oct 5 15:37 1998

Vial: 1
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	17.79	168	3597626	50.00 ppb		0.09
30) 1,4-Difluorobenzene	19.01	114	4556400	50.00 ppb		0.09
48) Chlorobenzene-d5	23.43	117	4247358	50.00 ppb		0.09
61) 1,4-dichlorobenzene-d4	26.88	152	2424503	50.00 ppb		0.09
System Monitoring Compounds						%Recovery
2) Dibromofluoromethane	17.81	113	2373079	54.41 ppb		108.81%
31) Toluene-d8	21.24	98	4763180	52.29 ppb		104.58%
60) 4-bromofluorobenzene	25.15	95	2565165	50.32 ppb		100.64%
Target Compounds						Qvalue
3) dichlorodifluoromethane	7.32	85	1974775	39.32 ppb		99
4) chloromethane	8.17	50	1382308	67.03 ppb		98
5) vinyl chloride	8.72	62	1051737	59.98 ppb		99
6) bromomethane	10.24	94	346897	60.60 ppb		98
7) chloroethane	10.72	64	313871	71.82 ppb		99
8) trichlorofluoromethane	11.41	101	1815094	60.17 ppb		100
9) Methyliodide	13.55	142	2192410	58.45 ppb		100
10) 1,1-dichloroethene	13.07	96	720244	58.72 ppb		91
11) methylene chloride	14.43	84	1475489	72.20 ppb	#	88
12) trans-1,2-dichloroethene	14.94	96	1509623	51.43 ppb		95
13) Ethylether	12.41	74	291407	53.12 ppb		100
14) Acetone	13.44	43	325135	38.64 ppb		96
15) Carbondisulfide	13.65	76	2339486	57.72 ppb		99
16) Acrolein	17.14	55	980909	39.87 ppb		100
17) Acrylonitrile	15.15	52	311860	41.05 ppb		100
18) Diisopropylether	15.84	87	1270034	45.78 ppb	#	59
19) Methyl-tert-butyl Ether (M	14.92	73	2011581	44.37 ppb	#	100
20) Vinylacetate	14.15	43	477383	66.72 ppb		100
21) 1,1-dichloroethane	15.92	63	2971834	48.72 ppb		98
22) 2,2-dichloropropane	16.96	77	1643125	55.07 ppb		97
23) cis-1,2-dichloroethene	17.01	96	1520371	49.09 ppb	#	85
24) bromochloromethane	17.45	128	866744	47.33 ppb	#	78
25) 2-Butanone (MEK)	17.05	72	151350	39.03 ppb	#	100
26) Tetrahydrofuran	17.49	72	128650	40.22 ppb	#	1
27) chloroform	17.52	83	2873117	48.30 ppb		96
28) 1,1,1-trichloroethane	17.82	97	2358872	52.24 ppb		86
29) Allyl chloride	13.65	76	2324591	58.19 ppb	#	98
32) 4-Methyl-2-pentanone (MIBK	21.03	43	1189803	39.23 ppb	#	78
33) 2-Chloroethyl Vinyl Ether	20.58	63	542811	48.48 ppb		100
34) carbon tetrachloride	18.04	117	2144632	53.25 ppb		94
35) 1,1-dichloropropene	18.07	75	2170060	54.73 ppb		87
6) benzene	18.43	78	4757627	48.20 ppb		96
7) 1,2-dichloroethane	18.55	62	1928273	46.68 ppb		94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : L:\HPCHEM\1\DATA\L05OCT98\10CC05A.D Vial: 1
Acq On : 5 Oct 98 2:32 pm Operator:
Sample : CAL CK 50 PPB Inst : 5972-INST
Misc : Multiplr: 1.00
Quant Time: Oct 5 15:37 1998

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	trichloroethene	19.42	95	1755539	46.61 ppb	#	75
39)	1,2-dichloropropane	19.86	63	1621744	50.46 ppb		78
40)	dibromomethane	20.05	93	1160767	46.54 ppb		99
41)	bromodichloromethane	20.23	83	2202402	46.14 ppb		97
42)	cis-1,3-dichloropropene	20.88	75	2136577	48.57 ppb		70
43)	toluene	21.33	92	2925632	47.73 ppb		100
44)	trans-1,3-dichloropropene	21.70	75	1669203	48.22 ppb		87
45)	1,1,2-trichloroethane	22.00	83	1044326	43.15 ppb	#	69
46)	1,2-Dibromoethane	22.83	107	1460129	43.53 ppb		99
47)	1,4-dichloro-2-butene	25.39	53	219987	58.82 ppb	#	9
49)	tetrachloroethene	22.12	166	2207686	37.33 ppb		86
50)	1,3-dichloropropane	22.26	76	1966693	43.79 ppb		98
51)	dibromochloromethane	22.60	129	1719303	43.01 ppb		97
52)	chlorobenzene	23.48	112	3805272	48.94 ppb		82
53)	1,1,1,2-tetrachloroethane	23.57	131	1624429	49.27 ppb		97
54)	ethylbenzene	23.52	91	5992489	48.27 ppb		100
5)	para & meta xylene	23.68	106	4620738	107.55 ppb		97
6)	ortho xylene	24.30	106	2321337	52.90 ppb		96
57)	styrene	24.33	104	3854777	54.30 ppb		96
58)	2-Hexanone (MBK)	22.23	43	1130139	40.00 ppb	#	69
59)	bromoform	24.74	173	1101646	40.61 ppb		96
62)	Isopropyl benzene	24.79	105	6241856	48.70 ppb	#	77
63)	bromobenzene	25.43	156	1843967	47.28 ppb	#	1
64)	1,1,2,2-tetrachloroethane	25.30	83	1669189	38.49 ppb	#	1
65)	1,2,3-trichloropropane	25.43	75	1804002	45.45 ppb	#	1
66)	n-propylbenzene	25.39	91	7806723	49.68 ppb		83
67)	2-chlorotoluene	25.64	91	5223176	49.40 ppb		95
68)	4-chlorotoluene	25.80	91	4491197	44.82 ppb		95
69)	1,3,5-trimethylbenzene	25.62	105	5236394	51.29 ppb	#	1
70)	tert-butylbenzene	26.14	119	5348008	49.01 ppb		98
71)	1,2,4-trimethylbenzene	26.22	105	5291157	49.36 ppb		76
72)	sec-butylbenzene	26.45	105	7285579	51.93 ppb		96
73)	1,3-dichlorobenzene	26.79	146	3126579	46.42 ppb		92
74)	p-isopropyltoluene	26.63	119	5970921	48.03 ppb	#	30
75)	1,4-dichlorobenzene	26.91	146	3336822	46.39 ppb		98
76)	1,2-dichlorobenzene	27.52	146	2956184	44.96 ppb	#	100
77)	n-butylbenzene	27.25	91	5953711	51.07 ppb	#	100
78)	1,2-dibromo-3-chloropropan	28.70	75	316990	46.98 ppb	#	1
79)	1,2,4-trichlorobenzene	29.97	180	2440924	44.75 ppb	#	100
80)	hexachlorobutadiene	30.10	225	1515192	45.52 ppb		97
81)	naphthalene	30.45	128	4092121	39.08 ppb		100
82)	1,2,3-trichlorobenzene	30.87	180	2251123	44.85 ppb		100
3)	hexachloroethane	27.85	201	652044	51.01 ppb	#	100
4)	2-methylnapthalene	32.55	142	2402864	36.44 ppb		97

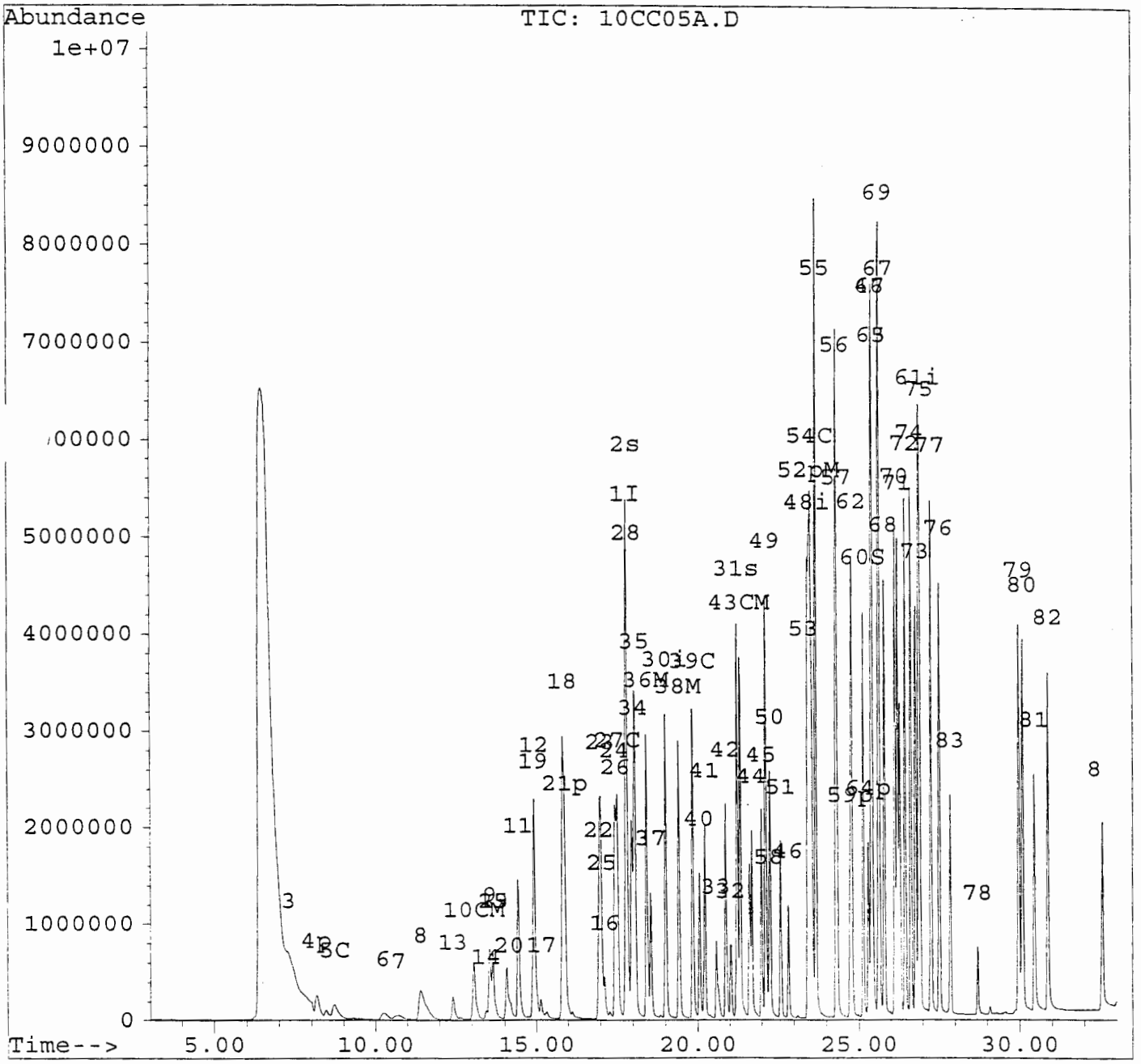
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : L:\HPCHEM\1\DATA\L05OCT98\10CC05A.D
Acq On : 5 Oct 98 2:32 pm
Sample : CAL CK 50 PPB
Misc :
Quant Time: Oct 5 15:37 1998

Vial: 1
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration



Evaluate Continuing Calibration Report

Data File : L:\HPCHEM\1\DATA\L05OCT98\10CC05A.D Vial: 1
Acq On : 5 Oct 98 2:32 pm Operator:
Sample : CAL CK 50 PPB Inst : 5972-INST
Misc : Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Pentafluorobenzene	1.000	1.000	0.0	106	0.09
2	s	Dibromofluoromethane	0.606	0.660	-8.8	117	0.09
3		dichlorodifluoromethane	0.698	0.549	21.4#	96	0.12
4	p	chloromethane	0.287	0.384	-34.1#	191	0.11
5	C	vinyl chloride	0.244	0.292	-20.0	152	0.09
6		bromomethane	0.080	0.096	-21.2#	161	0.14
7		chloroethane	0.061	0.087	-43.6#	179	0.16
8		trichlorofluoromethane	0.419	0.505	-20.3#	144	0.11
9		Methyliodide	0.521	0.609	-16.9	137	0.11
10	CM	1,1-dichloroethene	0.170	0.200	-17.4	141	0.11
11		methylene chloride	0.284	0.410	-44.4#	268#	0.09
12		trans-1,2-dichloroethene	0.408	0.420	-2.9	117	0.11
13		Ethylether	0.076	0.081	-6.2	127	0.09
14		Acetone	0.117	0.090	22.7#	100	0.11
[illegible]		Carbondisulfide	0.563	0.650	-15.4	133	0.11
16		Acrolein	0.342	0.273	20.3#	85	0.09
17		Acrylonitrile	0.106	0.087	17.9	91	0.11
18		Diisopropylether	0.386	0.353	8.4	100	0.09
19		Methyl-tert-butyl Ether (MT	0.630	0.559	11.3	100	0.11
20		Vinylacetate	0.099	0.133	-33.4#	152	0.09
21	p	1,1-dichloroethane	0.848	0.826	2.6	109	0.09
22		2,2-dichloropropane	0.415	0.457	-10.1	122	0.09
23		cis-1,2-dichloroethene	0.430	0.423	1.8	109	0.09
24		bromochloromethane	0.255	0.241	5.3	104	0.09
25		2-Butanone (MEK)	0.054	0.042	21.9#	86	0.09
26		Tetrahydrofuran	0.044	0.036	19.6	92	0.09
27	C	chloroform	0.827	0.799	3.4	109	0.09
28		1,1,1-trichloroethane	0.628	0.656	-4.5	120	0.09
29		Allyl chloride	0.555	0.646	-16.4	134	0.11
30	i	1,4-Difluorobenzene	1.000	1.000	0.0	101	0.09
31	s	Toluene-d8	1.000	1.045	-4.6	107	0.09
32		4-Methyl-2-pentanone (MIBK)	0.333	0.261	21.5#	81	0.07
33		2-Chloroethyl Vinyl Ether	0.123	0.119	3.0	95	0.09
34		carbon tetrachloride	0.442	0.471	-6.5	108	0.09
35		1,1-dichloropropene	0.435	0.476	-9.5	117	0.09
36	M	benzene	1.083	1.044	3.6	104	0.09
37		1,2-dichloroethane	0.453	0.423	6.6	101	0.09
38	M	trichloroethene	0.413	0.385	6.8	103	0.09
39	C	1,2-dichloropropane	0.353	0.356	-0.9	109	0.09
[illegible]		dibromomethane	0.274	0.255	6.9	99	0.09
41		bromodichloromethane	0.524	0.483	7.7	97	0.09

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : L:\HPCHEM\1\DATA\L05OCT98\10CC05A.D Vial: 1
Acq On : 5 Oct 98 2:32 pm Operator:
Sample : CAL CK 50 PPB Inst : 5972-INST
Misc : Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
42		cis-1,3-dichloropropene	0.483	0.469	2.9	100	0.09
43	CM	toluene	0.673	0.642	4.5	105	0.09
44		trans-1,3-dichloropropene	0.380	0.366	3.6	98	0.09
45		1,1,2-trichloroethane	0.266	0.229	13.7	91	0.09
46		1,2-Dibromoethane	0.368	0.320	12.9	90	0.09
47		1,4-dichloro-2-butene	0.041	0.048	-17.6	116	0.11
48	i	Chlorobenzene-d5	1.000	1.000	0.0	104	0.09
49		tetrachloroethene	0.696	0.520	25.3#	88	0.09
50		1,3-dichloropropane	0.529	0.463	12.4	95	0.09
51		dibromochloromethane	0.471	0.405	14.0	88	0.11
52	pM	chlorobenzene	0.915	0.896	2.1	108	0.11
53		1,1,1,2-tetrachloroethane	0.388	0.382	1.5	101	0.09
54	C	ethylbenzene	1.462	1.411	3.5	108	0.09
[illegible]		para & meta xylene	0.506	0.544	-7.5	119	0.00
[illegible]		ortho xylene	0.517	0.547	-5.8	114	0.00
57		styrene	0.836	0.908	-8.6	117	0.09
58		2-Hexanone (MBK)	0.333	0.266	20.0	82	0.09
59	p	bromoform	0.319	0.259	18.8	79	0.11
60	S	4-bromofluorobenzene	0.600	0.604	-0.6	107	0.02
61	i	1,4-dichlorobenzene-d4	1.000	1.000	0.0	106	0.09
62		Isopropyl benzene	2.643	2.574	2.6	109	0.11
63		bromobenzene	0.804	0.761	5.4	104	0.09
64	p	1,1,2,2-tetrachloroethane	0.894	0.688	23.0#	85	0.09
65		1,2,3-trichloropropane	0.819	0.744	9.1	102	0.07
66		n-propylbenzene	3.241	3.220	0.6	115	0.11
67		2-chlorotoluene	2.181	2.154	1.2	112	0.00
68		4-chlorotoluene	2.066	1.852	10.4	102	0.00
69		1,3,5-trimethylbenzene	2.105	2.160	-2.6	115	0.11
70		tert-butylbenzene	2.250	2.206	2.0	117	0.02
71		1,2,4-trimethylbenzene	2.211	2.182	1.3	112	0.11
72		sec-butylbenzene	2.894	3.005	-3.9	115	0.00
73		1,3-dichlorobenzene	1.389	1.290	7.2	103	0.11
74		p-isopropyltoluene	2.564	2.463	3.9	104	0.09
75		1,4-dichlorobenzene	1.483	1.376	7.2	105	0.00
76		1,2-dichlorobenzene	1.356	1.219	10.1	99	0.09
77		n-butylbenzene	2.404	2.456	-2.1	111	0.09
78		1,2-dibromo-3-chloropropane	0.139	0.131	6.0	82	0.09
79		1,2,4-trichlorobenzene	1.125	1.007	10.5	96	0.11
[illegible]		hexachlorobutadiene	0.686	0.625	9.0	95	0.11
[illegible]		naphthalene	2.160	1.688	21.8#	83	0.11

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : L:\HPCHEM\1\DATA\L05OCT98\10CC05A.D Vial: 1
Acq On : 5 Oct 98 2:32 pm Operator:
Sample : CAL CK 50 PPB Inst : 5972-INST
Misc : Multiplr: 1.00

Method : L:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
82	1,2,3-trichlorobenzene	1.035	0.928	10.3	96	0.11
83	hexachloroethane	0.264	0.269	-2.0	86	0.09
84	2-methylnapthalene	1.360	0.991	27.1#	80	0.12

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L01OCT98\10BLK01B.D
Acq On : 1 Oct 98 10:33 am
Sample : METHOD BLANK
Misc :
Quant Time: Oct 1 11:07 1998

Vial: 4
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 16:20:26 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	17.74	168	3911512	50.00 ppb		0.04
30) 1,4-Difluorobenzene	18.96	114	4959377	50.00 ppb		0.04
48) Chlorobenzene-d5	23.38	117	4175130	50.00 ppb		0.04
61) 1,4-dichlorobenzene-d4	26.83	152	2070205	50.00 ppb		0.04
System Monitoring Compounds						**%Recovery**
2) Dibromofluoromethane	17.76	113	2377406	50.13 ppb		100.26%
31) Toluene-d8	21.19	98	4863131	49.05 ppb		98.10%
60) 4-bromofluorobenzene	25.10	95	2449772	48.89 ppb		97.77%
Target Compounds						**Qvalue**
11) methylene chloride	14.38	84	12032	0.54 ppb		99
14) Acetone	13.37	43	4553	0.50 ppb	#	83
20) Vinylacetate	14.11	43	2295	0.30 ppb		100
47) 1,4-dichloro-2-butene	25.36	53	1223	0.30 ppb	#	1
5) para & meta xylene	23.63	106	11423	0.27 ppb		91
9) 1,2,4-trichlorobenzene	29.92	180	12088	0.26 ppb	#	100
80) hexachlorobutadiene	30.05	225	6142	0.22 ppb		93
81) naphthalene	30.40	128	23805	0.27 ppb		100
82) 1,2,3-trichlorobenzene	30.82	180	10486	0.24 ppb		97
84) 2-methylnapthalene	32.50	142	31280	0.56 ppb		94

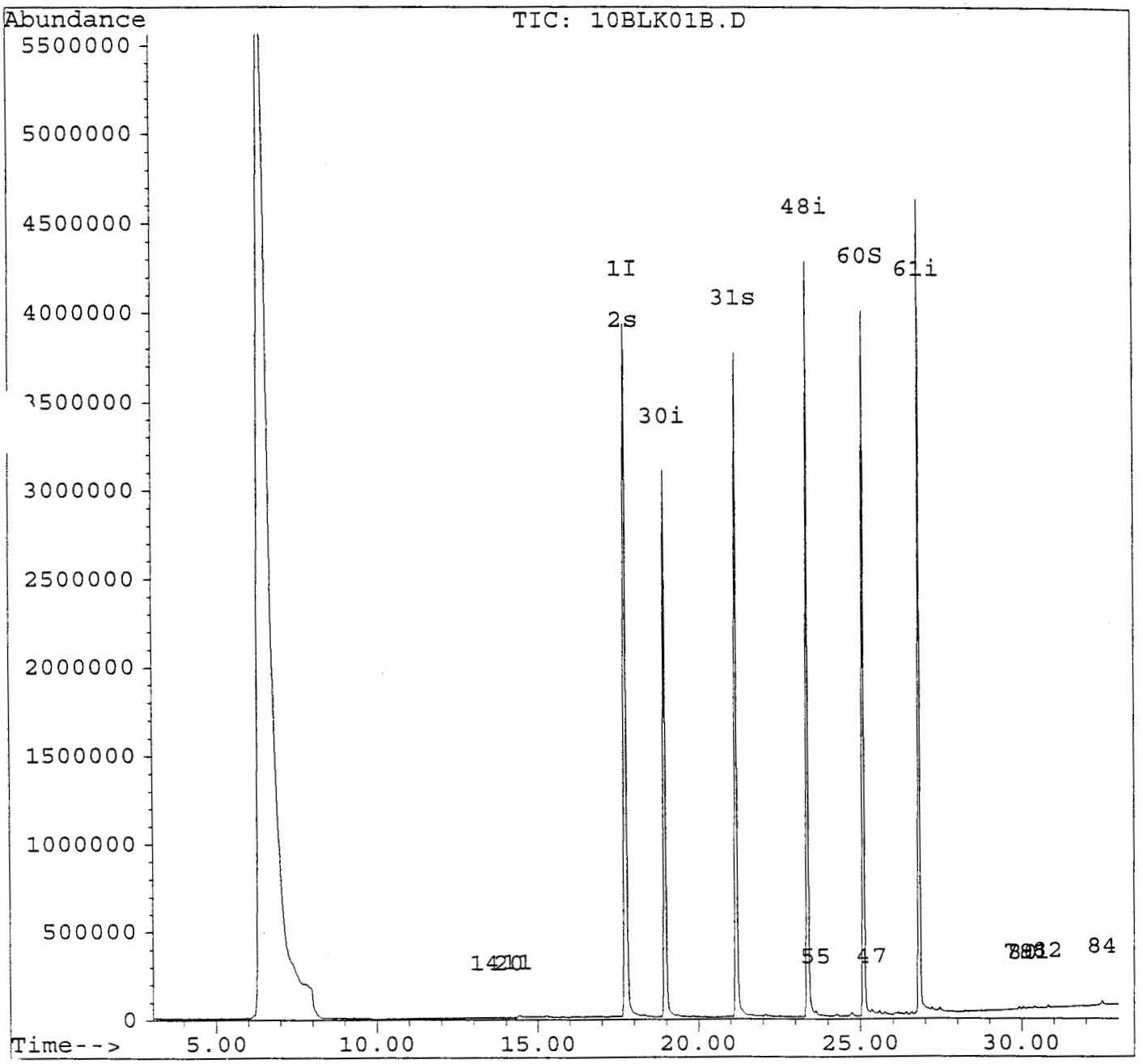
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L01OCT98\10BLK01B.D
Acq On : 1 Oct 98 10:33 am
Sample : METHOD BLANK
Misc :
Quant Time: Oct 1 11:07 1998

Vial: 4
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 16:20:26 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\10BLK02B.D Vial: 4
Acq On : 2 Oct 98 11:34 am Operator:
Sample : METHOD BLANK Inst : 5972-INST
Misc : Multiplr: 1.00
Quant Time: Oct 2 12:08 1998

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	17.74	168	3674698	50.00 ppb	0.04
30) 1,4-Difluorobenzene	18.98	114	4726832	50.00 ppb	0.05
48) Chlorobenzene-d5	23.40	117	3985059	50.00 ppb	0.05
61) 1,4-dichlorobenzene-d4	26.84	152	2046739	50.00 ppb	0.05
System Monitoring Compounds					**%Recovery**
2) Dibromofluoromethane	17.77	113	2412690	54.15 ppb	108.31%
31) Toluene-d8	21.19	98	4688495	49.62 ppb	99.23%
60) 4-bromofluorobenzene	25.11	95	2414054	50.47 ppb	100.94%
Target Compounds					**Qvalue**
4) chloromethane	8.17	50	11683	0.55 ppb #	41
11) methylene chloride	14.38	84	13417	0.64 ppb	90
14) Acetone	13.39	43	2196	0.26 ppb #	65
47) 1,4-dichloro-2-butene	25.34	53	1203	0.31 ppb #	1
81) naphthalene	30.42	128	20353	0.23 ppb	100
2) 1,2,3-trichlorobenzene	30.84	180	8576	0.20 ppb	100
,4) 2-methylnapthalene	32.52	142	23513	0.42 ppb #	96

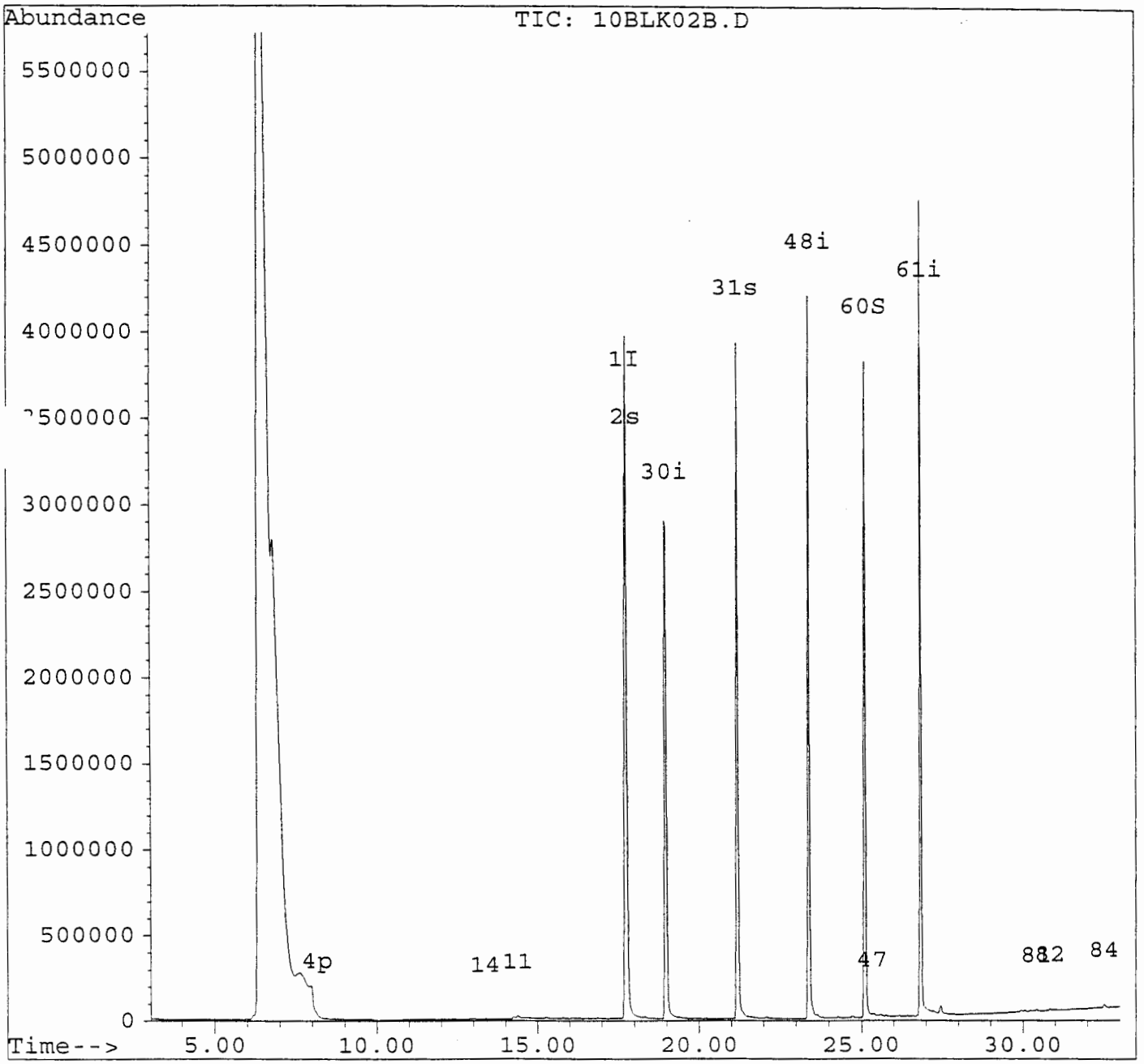
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\10BLK02B.D
Acq On : 2 Oct 98 11:34 am
Sample : METHOD BLANK
Misc :
Quant Time: Oct 2 12:08 1998

Vial: 4
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\10BLK02A.D
Acq On : 2 Oct 98 6:00 pm
Sample : Method blank 5ml
Misc :
Quant Time: Oct 2 18:39 1998

Vial: 3
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	20.47	168	2100351	50.00 ppb	-0.03
30) 1,4-Difluorobenzene	21.97	114	3172098	50.00 ppb	-0.03
48) Chlorobenzene-d5	27.58	117	2629777	50.00 ppb	-0.03
61) 1,4-dichlorobenzene-d4	32.14	152	966847	50.00 ppb	0.00
System Monitoring Compounds					**%Recovery**
2) Dibromofluoromethane	20.53	113	1235915	49.24 ppb	98.48%
31) Toluene-d8	24.80	98	3232828	47.64 ppb	95.28%
60) 4-bromofluorobenzene	29.80	95	1149371	42.58 ppb	85.17%
Target Compounds					**Qvalue**
4) chloromethane	10.70	50	26306	0.36 ppb	84
11) methylene chloride	16.79	84	10221	0.32 ppb	98
13) Ethylether	14.85	74	3976	0.33 ppb	100
14) Acetone	15.67	43	9630	1.00 ppb	90
16) Acrolein	19.77	55	6613	0.39 ppb	100
7) Acrylonitrile	17.36	52	2496	0.44 ppb	100
9) Methyl-tert-butyl Ether (M	17.45	73	9272	0.20 ppb #	77
25) 2-Butanone (MEK)	19.61	72	1195	0.51 ppb #	30
26) Tetrahydrofuran	20.23	72	506	0.25 ppb #	1
32) 4-Methyl-2-pentanone (MIBK	24.44	43	5458	0.29 ppb #	92
40) dibromomethane	23.26	93	2631	0.20 ppb #	59
58) 2-Hexanone (MBK)	26.00	43	4857	0.32 ppb #	42
64) 1,1,2,2-tetrachloroethane	29.97	83	5678	0.37 ppb	78
65) 1,2,3-trichloropropane	30.12	75	9848	0.61 ppb	68
79) 1,2,4-trichlorobenzene	36.49	180	2577	0.30 ppb	95
81) naphthalene	37.17	128	17220	1.02 ppb	100
82) 1,2,3-trichlorobenzene	37.82	180	3474	0.62 ppb	92

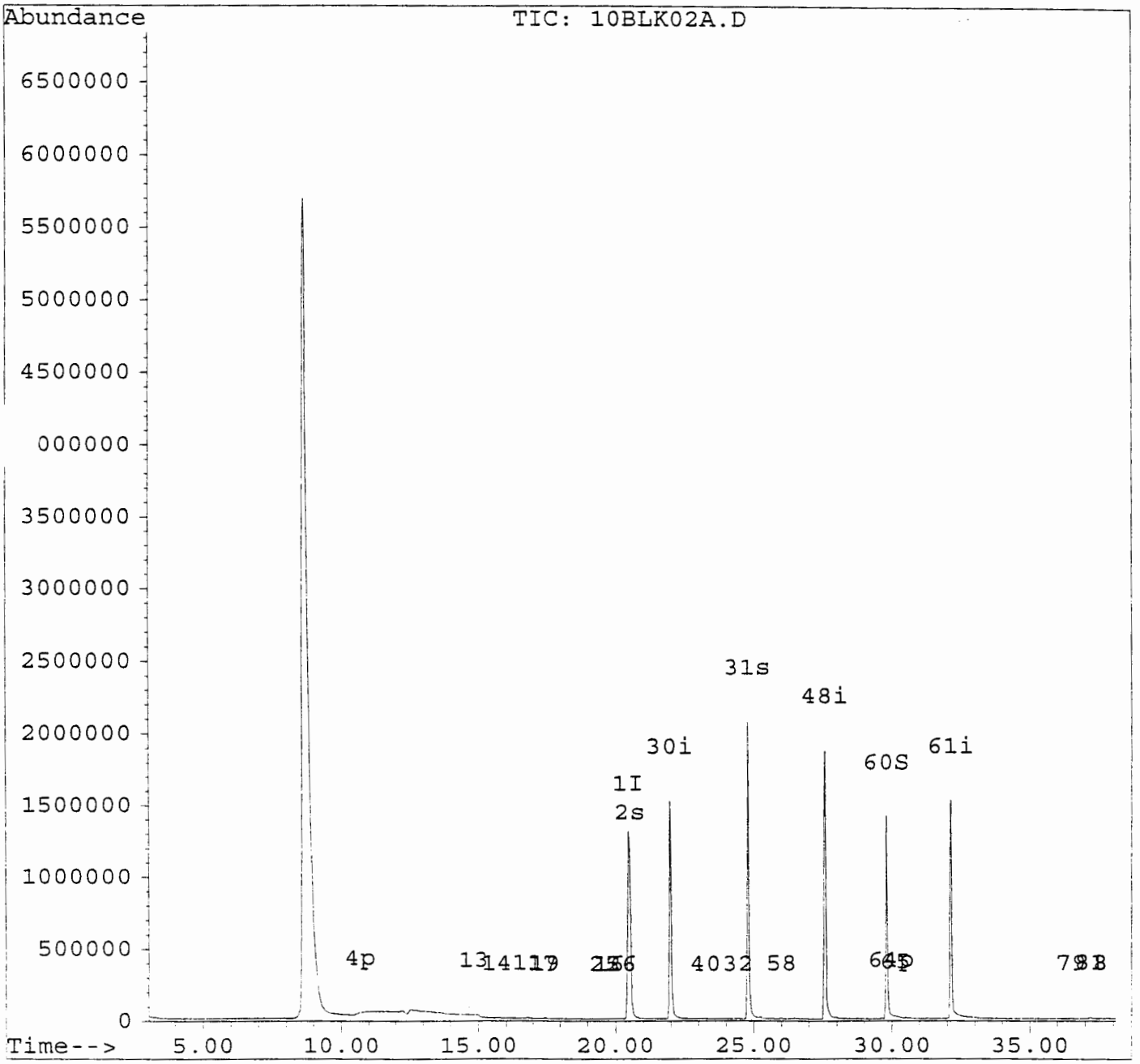
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\10BLK02A.D
Acq On : 2 Oct 98 6:00 pm
Sample : Method blank 5ml
Misc :
Quant Time: Oct 2 18:39 1998

Vial: 3
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\10BLK05B.D Vial: 4
Acq On : 5 Oct 98 4:33 pm Operator:
Sample : method BLANK Inst : 5972-INST
Misc : Multiplr: 1.00
Quant Time: Oct 5 17:07 1998

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	17.79	168	3473181	50.00 ppb	0.09
30) 1,4-Difluorobenzene	19.01	114	4412887	50.00 ppb	0.09
48) Chlorobenzene-d5	23.43	117	3912996	50.00 ppb	0.09
61) 1,4-dichlorobenzene-d4	26.90	152	1856317	50.00 ppb	0.11
System Monitoring Compounds					**%Recovery**
2) Dibromofluoromethane	17.83	113	2288127	54.34 ppb	108.68%
31) Toluene-d8	21.24	98	4528979	51.34 ppb	102.68%
60) 4-bromofluorobenzene	25.15	95	2285233	48.66 ppb	97.32%
Target Compounds					**Qvalue**
4) chloromethane	8.29	50	8011	0.40 ppb #	57
11) methylene chloride	14.45	84	8595	0.44 ppb #	79
14) Acetone	13.42	43	6356	0.78 ppb #	90
43) toluene	21.34	92	18668	0.31 ppb	100
47) 1,4-dichloro-2-butene	25.39	53	737	0.20 ppb #	1
5) para & meta xylene	23.70	106	9777	0.25 ppb	95
,2) 1,2,3-trichlorobenzene	30.88	180	8085	0.21 ppb	98
84) 2-methylnapthalene	32.57	142	25257	0.50 ppb	89

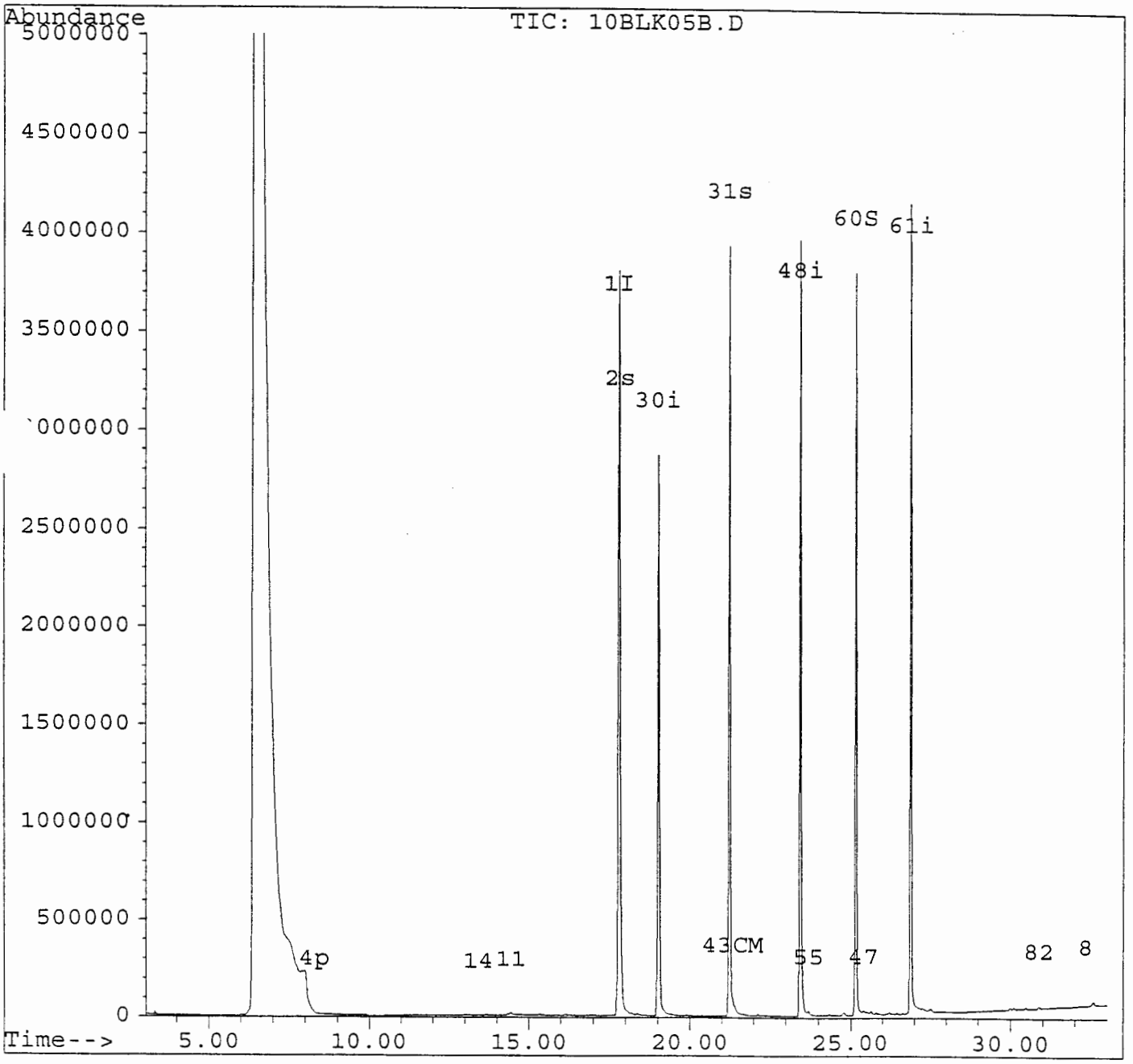
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\10BLK05B.D
Acq On : 5 Oct 98 4:33 pm
Sample : method BLANK
Misc :
Quant Time: Oct 5 17:07 1998

Vial: 4
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L01OCT98\10LCS01A.D
Acq On : 1 Oct 98 9:12 am
Sample : LCS 50 PPB
Misc :
Quant Time: Oct 1 9:46 1998

Vial: 2
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 16:20:26 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	17.72	168	4165681	50.00 ppb		0.02
30) 1,4-Difluorobenzene	18.94	114	5362794	50.00 ppb		0.02
48) Chlorobenzene-d5	23.38	117	4784999	50.00 ppb		0.04
61) 1,4-dichlorobenzene-d4	26.83	152	2630238	50.00 ppb		0.04
System Monitoring Compounds						**%Recovery**
2) Dibromofluoromethane	17.76	113	2396484	47.45 ppb		94.90%
31) Toluene-d8	21.17	98	5279837	49.25 ppb		98.50%
60) 4-bromofluorobenzene	25.08	95	2744667	47.79 ppb		95.58%
Target Compounds						**Qvalue**
3) dichlorodifluoromethane	7.24	85	1284077	22.08 ppb		99
4) chloromethane	8.10	50	912156	38.20 ppb		100
5) vinyl chloride	8.63	62	823907	40.58 ppb		99
6) bromomethane	10.14	94	281783	42.51 ppb		97
7) chloroethane	10.58	64	220711	43.62 ppb		100
8) trichlorofluoromethane	11.32	101	1403736	40.19 ppb		100
9) Methyliodide	13.46	142	1788959	41.19 ppb		97
10) 1,1-dichloroethene	12.98	96	603866	42.52 ppb		93
11) methylene chloride	14.36	84	1659105	70.11 ppb		98
12) trans-1,2-dichloroethene	14.88	96	1653193	48.64 ppb		97
13) Ethylether	12.35	74	245915	38.71 ppb		100
14) Acetone	13.35	43	292403	30.01 ppb		97
15) Carbondisulfide	13.57	76	1825021	38.88 ppb		99
16) Acrolein	17.07	55	1201438	42.18 ppb		100
17) Acrylonitrile	15.07	52	360572	40.99 ppb		100
18) Diisopropylether	15.78	87	726709	22.62 ppb		85
19) Methyl-tert-butyl Ether (M	14.84	73	2419131	46.09 ppb	#	100
20) Vinylacetate	14.08	43	410336	49.53 ppb		100
21) 1,1-dichloroethane	15.85	63	3121825	44.20 ppb		98
22) 2,2-dichloropropane	16.89	77	1733086	50.16 ppb		96
23) cis-1,2-dichloroethene	16.94	96	1698983	47.38 ppb		93
24) bromochloromethane	17.39	128	1040584	49.07 ppb		93
25) 2-Butanone (MEK)	16.98	72	183516	40.87 ppb	#	100
26) Tetrahydrofuran	17.42	72	148576	40.12 ppb	#	1
27) chloroform	17.46	83	3123078	45.34 ppb		95
28) 1,1,1-trichloroethane	17.76	97	2377713	45.48 ppb	#	81
29) Allyl chloride	13.57	76	1815434	39.24 ppb	#	98
32) 4-Methyl-2-pentanone (MIBK	20.98	43	1476687	41.37 ppb	#	79
33) 2-Chloroethyl Vinyl Ether	20.53	63	644843	48.93 ppb		100
34) carbon tetrachloride	17.97	117	2385774	50.33 ppb		94
35) 1,1-dichloropropene	18.01	75	2390280	51.22 ppb		88
36) benzene	18.36	78	5456920	46.98 ppb		97
37) 1,2-dichloroethane	18.48	62	2139359	44.00 ppb		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L01OCT98\10LCS01A.D
Acq On : 1 Oct 98 9:12 am
Sample : LCS 50 PPB
Misc :
Quant Time: Oct 1 9:46 1998

Vial: 2
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 16:20:26 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	trichloroethene	19.35	95	1997063	45.05 ppb	#	69
39)	1,2-dichloropropane	19.79	63	1752001	46.32 ppb		79
40)	dibromomethane	20.00	93	1326732	45.19 ppb	#	85
41)	bromodichloromethane	20.16	83	2549172	45.38 ppb		97
42)	cis-1,3-dichloropropene	20.82	75	2486140	48.02 ppb		70
43)	toluene	21.28	92	3395255	47.06 ppb		99
44)	trans-1,3-dichloropropene	21.63	75	1985742	48.74 ppb		86
45)	1,1,2-trichloroethane	21.93	83	1218561	42.77 ppb	#	68
46)	1,2-Dibromoethane	22.78	107	1784937	45.22 ppb		100
47)	1,4-dichloro-2-butene	25.33	53	221179	50.24 ppb	#	10
49)	tetrachloroethene	22.07	166	2780527	41.73 ppb	#	82
50)	1,3-dichloropropane	22.21	76	2287228	45.21 ppb		98
51)	dibromochloromethane	22.53	129	2146646	47.66 ppb		97
52)	chlorobenzene	23.42	112	4294421	49.03 ppb		83
53)	1,1,1,2-tetrachloroethane	23.50	131	1901401	51.19 ppb		96
54)	ethylbenzene	23.47	91	6573235	46.99 ppb		98
5)	para & meta xylene	23.63	106	4967940	102.63 ppb	#	85
56)	ortho xylene	24.25	106	2540296	51.39 ppb		92
57)	styrene	24.27	104	4282817	53.55 ppb		99
58)	2-Hexanone (MBK)	22.18	43	1357615	42.65 ppb	#	66
59)	bromoform	24.67	173	1373691	44.94 ppb		96
62)	Isopropyl benzene	24.72	105	6931374	49.85 ppb	#	78
63)	bromobenzene	25.38	156	2129468	50.33 ppb	#	1
64)	1,1,2,2-tetrachloroethane	25.26	83	1919860	40.81 ppb	#	1
65)	1,2,3-trichloropropane	25.38	75	1938651	45.02 ppb	#	1
66)	n-propylbenzene	25.34	91	8306472	48.73 ppb		87
67)	2-chlorotoluene	25.59	91	5495522	47.91 ppb	#	85
68)	4-chlorotoluene	25.75	91	5017393	46.16 ppb	#	85
69)	1,3,5-trimethylbenzene	25.57	105	5576135	50.35 ppb	#	1
70)	tert-butylbenzene	26.09	119	5432372	45.89 ppb		95
71)	1,2,4-trimethylbenzene	26.16	105	5884712	50.60 ppb		76
72)	sec-butylbenzene	26.40	105	7944189	52.19 ppb		99
73)	1,3-dichlorobenzene	26.72	146	3526392	48.26 ppb		93
74)	p-isopropyltoluene	26.58	119	6614182	49.04 ppb	#	31
75)	1,4-dichlorobenzene	26.86	146	3712337	47.57 ppb	#	1
76)	1,2-dichlorobenzene	27.47	146	3349546	46.96 ppb	#	100
77)	n-butylbenzene	27.20	91	6462845	51.10 ppb	#	100
78)	1,2-dibromo-3-chloropropan	28.65	75	381242	52.09 ppb	#	1
79)	1,2,4-trichlorobenzene	29.92	180	2642412	44.65 ppb	#	100
80)	hexachlorobutadiene	30.05	225	1643568	45.52 ppb		95
81)	naphthalene	30.40	128	4553999	40.08 ppb		100
82)	1,2,3-trichlorobenzene	30.81	180	2413998	44.34 ppb		100
3)	hexachloroethane	27.80	201	827239	59.66 ppb	#	100
84)	2-methylnapthalene	32.49	142	2540445	35.51 ppb		96

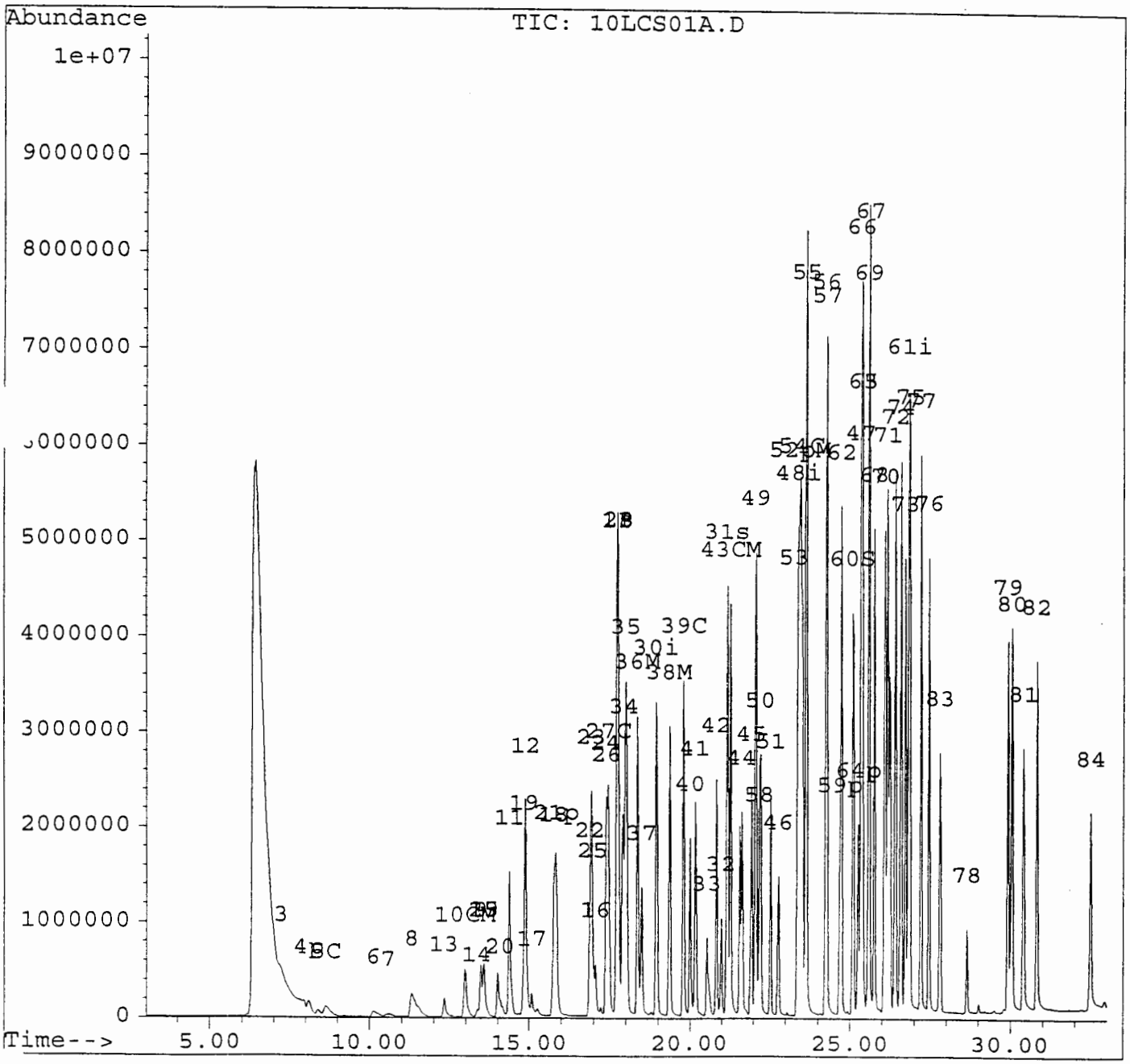
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L01OCT98\10LCS01A.D
Acq On : 1 Oct 98 9:12 am
Sample : LCS 50 PPB
Misc :
Quant Time: Oct 1 9:46 1998

Vial: 2
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Wed Sep 30 16:20:26 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\10LCS02A.D
Acq On : 2 Oct 98 10:13 am
Sample : LCS 50 PPB
Misc :
Quant Time: Oct 2 10:47 1998

Vial: 2
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	17.74	168	4689944	50.00 ppb		0.04
30) 1,4-Difluorobenzene	18.96	114	6064528	50.00 ppb		0.04
48) Chlorobenzene-d5	23.38	117	5472488	50.00 ppb		0.04
61) 1,4-dichlorobenzene-d4	26.84	152	3158645	50.00 ppb		0.05
System Monitoring Compounds						**%Recovery**
2) Dibromofluoromethane	17.75	113	2912796	51.23 ppb		102.45%
31) Toluene-d8	21.19	98	6018080	49.64 ppb		99.28%
60) 4-bromofluorobenzene	25.09	95	3242583	49.37 ppb		98.73%
Target Compounds						**Qvalue**
3) dichlorodifluoromethane	7.23	85	1061028	16.20 ppb		99
4) chloromethane	8.10	50	832099	30.95 ppb		99
5) vinyl chloride	8.65	62	835491	36.55 ppb		99
6) bromomethane	10.13	94	296975	39.80 ppb		97
7) chloroethane	10.61	64	223097	39.16 ppb		97
8) trichlorofluoromethane	11.34	101	1557104	39.59 ppb		100
9) Methyliodide	13.48	142	2104216	43.03 ppb		97
10) 1,1-dichloroethene	13.00	96	699519	43.75 ppb		91
11) methylene chloride	14.38	84	1689328	63.41 ppb		95
12) trans-1,2-dichloroethene	14.89	96	1641123	42.89 ppb		98
13) Ethylether	12.36	74	285116	39.87 ppb		100
14) Acetone	13.37	43	336197	30.65 ppb		95
15) Carbondisulfide	13.58	76	2049597	38.79 ppb		99
16) Acrolein	17.08	55	1188953	37.07 ppb		100
17) Acrylonitrile	15.08	52	373998	37.76 ppb		100
18) Diisopropylether	15.79	87	718135	19.86 ppb		78
19) Methyl-tert-butyl Ether (M	14.85	73	2306069	39.02 ppb	#	100
20) Vinylacetate	14.09	43	411783	44.15 ppb		100
21) 1,1-dichloroethane	15.85	63	3150715	39.62 ppb		98
22) 2,2-dichloropropane	16.91	77	1681226	43.22 ppb		96
23) cis-1,2-dichloroethene	16.96	96	1702780	42.18 ppb		91
24) bromochloromethane	17.40	128	1028996	43.10 ppb	#	90
25) 2-Butanone (MEK)	16.99	72	186419	36.87 ppb	#	100
26) Tetrahydrofuran	17.44	72	152293	36.53 ppb	#	1
27) chloroform	17.47	83	3197993	41.24 ppb		95
28) 1,1,1-trichloroethane	17.77	97	2444445	41.53 ppb	#	81
29) Allyl chloride	13.58	76	2033273	39.04 ppb	#	98
32) 4-Methyl-2-pentanone (MIBK	20.99	43	1493122	36.99 ppb	#	78
33) 2-Chloroethyl Vinyl Ether	20.53	63	612033	41.07 ppb		100
34) carbon tetrachloride	17.98	117	2379054	44.38 ppb		94
35) 1,1-dichloropropene	18.02	75	2391787	45.32 ppb		88
36) benzene	18.37	78	5451771	41.50 ppb		97
37) 1,2-dichloroethane	18.50	62	2182839	39.70 ppb		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\10LCS02A.D Vial: 2
Acq On : 2 Oct 98 10:13 am Operator:
Sample : LCS 50 PPB Inst : 5972-INST
Misc : Multiplr: 1.00
Quant Time: Oct 2 10:47 1998

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	trichloroethene	19.36	95	1984206	39.58 ppb	#	69
39)	1,2-dichloropropane	19.81	63	1802548	42.14 ppb		79
40)	dibromomethane	20.00	93	1355504	40.83 ppb		97
41)	bromodichloromethane	20.18	83	2577713	40.58 ppb		97
42)	cis-1,3-dichloropropene	20.83	75	2442070	41.71 ppb		71
43)	toluene	21.29	92	3326486	40.77 ppb		100
44)	trans-1,3-dichloropropene	21.65	75	1910259	41.46 ppb		88
45)	1,1,2-trichloroethane	21.95	83	1236227	38.37 ppb	#	68
46)	1,2-Dibromoethane	22.79	107	1771256	39.68 ppb		100
47)	1,4-dichloro-2-butene	25.34	53	229342	46.07 ppb	#	9
49)	tetrachloroethene	22.09	166	2718720	35.68 ppb	#	81
50)	1,3-dichloropropane	22.23	76	2284102	39.47 ppb		98
51)	dibromochloromethane	22.55	129	2099626	40.76 ppb		97
52)	chlorobenzene	23.43	112	4311328	43.04 ppb		84
53)	1,1,1,2-tetrachloroethane	23.52	131	1898357	44.69 ppb		96
54)	ethylbenzene	23.47	91	6646592	41.55 ppb		99
5)	para & meta xylene	23.64	106	5060864	91.42 ppb	#	85
56)	ortho xylene	24.24	106	2591621	45.84 ppb		98
57)	styrene	24.28	104	4288482	46.89 ppb		98
58)	2-Hexanone (MBK)	22.19	43	1323705	36.36 ppb	#	66
59)	bromoform	24.69	173	1346132	38.51 ppb		97
62)	Isopropyl benzene	24.74	105	6998466	41.91 ppb	#	78
63)	bromobenzene	25.38	156	2134226	42.01 ppb	#	1
64)	1,1,2,2-tetrachloroethane	25.25	83	1963406	34.75 ppb	#	1
65)	1,2,3-trichloropropane	25.39	75	2004811	38.77 ppb	#	1
66)	n-propylbenzene	25.34	91	8520663	41.62 ppb		82
67)	2-chlorotoluene	25.61	91	5710022	41.45 ppb	#	85
68)	4-chlorotoluene	25.77	91	4968763	38.06 ppb	#	85
69)	1,3,5-trimethylbenzene	25.59	105	5768072	43.37 ppb	#	1
70)	tert-butylbenzene	26.08	119	5286678	37.19 ppb		100
71)	1,2,4-trimethylbenzene	26.17	105	5878398	42.09 ppb		75
72)	sec-butylbenzene	26.42	105	8026051	43.91 ppb		99
73)	1,3-dichlorobenzene	26.74	146	3489230	39.76 ppb		93
74)	p-isopropyltoluene	26.60	119	6615789	40.84 ppb	#	31
75)	1,4-dichlorobenzene	26.88	146	3722050	39.72 ppb	#	1
76)	1,2-dichlorobenzene	27.48	146	3352098	39.14 ppb	#	100
77)	n-butylbenzene	27.22	91	6485409	42.70 ppb	#	100
78)	1,2-dibromo-3-chloropropan	28.67	75	378606	43.07 ppb	#	1
79)	1,2,4-trichlorobenzene	29.92	180	2672717	37.61 ppb	#	100
80)	hexachlorobutadiene	30.04	225	1618478	37.32 ppb		98
81)	naphthalene	30.42	128	4678637	34.29 ppb		100
82)	1,2,3-trichlorobenzene	30.82	180	2465712	37.71 ppb		100
3)	hexachloroethane	27.82	201	783487	47.05 ppb	#	100
84)	2-methylnapthalene	32.50	142	2643081	30.77 ppb		97

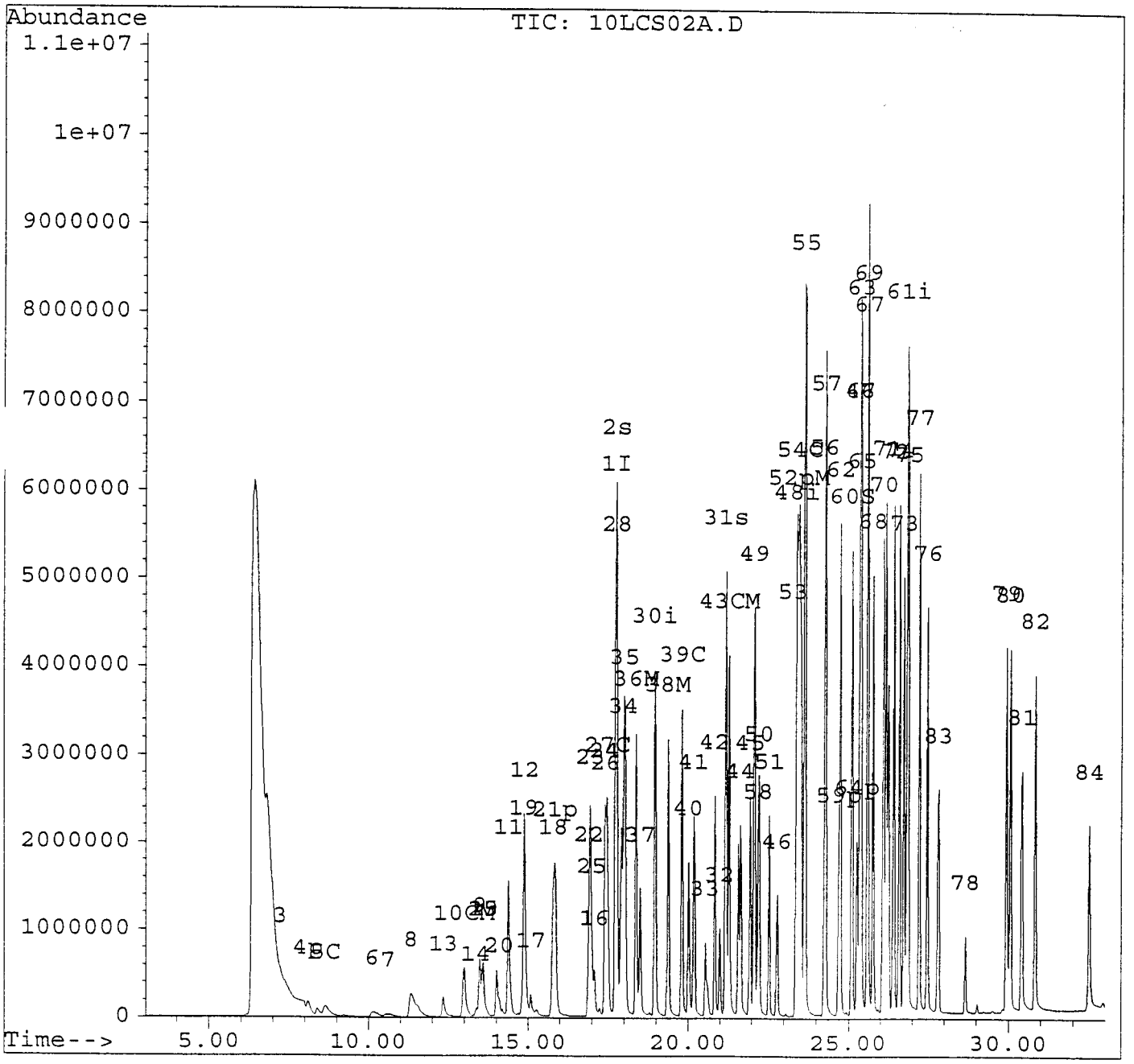
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\10LCS02A.D
Acq On : 2 Oct 98 10:13 am
Sample : LCS 50 PPB
Misc :
Quant Time: Oct 2 10:47 1998

Vial: 2
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\10LCS02A.D Vial: 2
Acq On : 2 Oct 98 5:10 pm Operator: pj
Sample : lcs 50 ppb Inst : 5972-INST
Misc : Multiplr: 1.00
Quant Time: Oct 2 17:48 1998

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	20.47	168	2831393	50.00 ppb		-0.03
30) 1,4-Difluorobenzene	21.97	114	4433767	50.00 ppb		-0.03
48) Chlorobenzene-d5	27.58	117	4106050	50.00 ppb		-0.03
61) 1,4-dichlorobenzene-d4	32.14	152	2330233	50.00 ppb		0.00
System Monitoring Compounds						**%Recovery**
2) Dibromofluoromethane	20.53	113	1650300	48.77 ppb		97.55%
31) Toluene-d8	24.80	98	4747463	50.05 ppb		100.10%
60) 4-bromofluorobenzene	29.80	95	2036945	48.33 ppb		96.67%
Target Compounds						**Qvalue**
3) dichlorodifluoromethane	9.64	85	767388	21.13 ppb		99
4) chloromethane	10.59	50	1880071	18.88 ppb		98
5) vinyl chloride	11.15	62	2450487	54.62 ppb		100
6) bromomethane	12.64	94	938705	31.12 ppb		98
7) chloroethane	13.01	64	1238051	49.48 ppb		97
8) trichlorofluoromethane	13.95	101	2140612	46.92 ppb		99
9) Methyliodide	16.00	142	1456354	34.57 ppb		95
10) 1,1-dichloroethene	15.55	96	1002642	41.25 ppb		88
11) methylene chloride	16.79	84	1165905	26.73 ppb		98
12) trans-1,2-dichloroethene	17.45	96	1179900	42.91 ppb		94
13) Ethylether	14.88	74	782951	47.83 ppb		100
14) Acetone	15.68	43	333484	25.77 ppb		90
15) Carbondisulfide	16.23	76	3619028	36.46 ppb		99
16) Acrolein	19.74	55	898305	39.07 ppb		100
17) Acrylonitrile	17.35	52	280950	36.59 ppb		100
18) Diisopropylether	18.45	87	580120	20.17 ppb		67
19) Methyl-tert-butyl Ether (M	17.44	73	2553146	40.91 ppb		93
20) Vinylacetate	18.45	43	1399894	18.44 ppb		100
21) 1,1-dichloroethane	18.39	63	2369778	38.51 ppb		98
22) 2,2-dichloropropane	19.64	77	1559040	41.02 ppb		91
23) cis-1,2-dichloroethene	19.61	96	1225699	43.02 ppb		95
24) bromochloromethane	20.11	128	560620	40.77 ppb	#	70
25) 2-Butanone (MEK)	19.59	72	115852	36.56 ppb		95
26) Tetrahydrofuran	20.24	72	105193	38.51 ppb		80
27) chloroform	20.21	83	1872726	38.97 ppb		97
28) 1,1,1-trichloroethane	20.67	97	1488332	38.42 ppb		91
29) Allyl chloride	16.23	76	3619028	36.46 ppb	#	99
32) 4-Methyl-2-pentanone (MIBK	24.42	43	1001623	38.34 ppb	#	96
33) 2-Chloroethyl Vinyl Ether	23.86	63	620016	46.02 ppb		100
34) carbon tetrachloride	21.02	117	1200081	40.39 ppb		100
35) 1,1-dichloropropene	20.95	75	1723731	46.15 ppb		99
36) benzene	21.39	78	4705806	41.35 ppb		97
37) 1,2-dichloroethane	21.38	62	1215710	37.13 ppb		90

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\10LCS02A.D
Acq On : 2 Oct 98 5:10 pm
Sample : lcs 50 ppb
Misc :
Quant Time: Oct 2 17:48 1998

Vial: 2
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	trichloroethene	22.56	95	1358799	42.06	ppb		100
39)	1,2-dichloropropane	22.98	63	1491694	41.64	ppbL		96
40)	dibromomethane	23.24	93	736823	40.30	ppb	#	76
41)	bromodichloromethane	23.45	83	1466511	40.59	ppb		97
42)	cis-1,3-dichloropropene	24.26	75	1755558	41.86	ppb		97
43)	toluene	24.94	92	2577561	40.78	ppb		99
44)	trans-1,3-dichloropropene	25.23	75	1473831	42.76	ppb		96
45)	1,1,2-trichloroethane	25.62	83	855216	39.82	ppb		96
46)	1,2-Dibromoethane	26.74	107	1058838	43.88	ppb	#	99
47)	1,4-dichloro-2-butene	30.05	53	186101	44.36	ppb	#	7
49)	tetrachloroethene	26.02	166	2126345	45.57	ppb		90
50)	1,3-dichloropropane	25.95	76	1918396	44.30	ppb		99
51)	dibromochloromethane	26.44	129	1131622	44.00	ppb		100
52)	chlorobenzene	27.64	112	3180964	44.66	ppb		95
53)	1,1,1,2-tetrachloroethane	27.73	131	1218921	47.75	ppb	#	80
54)	ethylbenzene	27.74	91	5942508	49.68	ppb		98
5)	para & meta xylene	27.95	106	4487616	98.71	ppb	#	86
5)	ortho xylene	28.76	106	2099951	46.12	ppb	#	85
57)	styrene	28.76	104	3606724	50.44	ppb		95
58)	2-Hexanone (MBK)	25.95	43	1051791	43.92	ppb		96
59)	bromoform	29.24	173	610016	40.44	ppb		98
62)	Isopropyl benzene	29.42	105	5516690	42.75	ppb		96
63)	bromobenzene	30.20	156	1320768	39.82	ppb	#	78
64)	1,1,2,2-tetrachloroethane	29.95	83	1148932	31.39	ppb		97
65)	1,2,3-trichloropropane	30.11	75	1280475	32.93	ppb		89
66)	n-propylbenzene	30.23	91	7517506	42.78	ppb		97
67)	2-chlorotoluene	30.52	91	4790106	43.00	ppb		98
68)	4-chlorotoluene	30.71	91	3839788	41.71	ppb		94
69)	1,3,5-trimethylbenzene	30.53	105	4723032	43.46	ppb		94
70)	tert-butylbenzene	31.23	119	4439855	40.36	ppb		87
71)	1,2,4-trimethylbenzene	31.32	105	4841511	44.64	ppb		93
72)	sec-butylbenzene	31.67	105	7151841	46.24	ppb		97
73)	1,3-dichlorobenzene	32.02	146	2675428	43.24	ppb		97
74)	p-isopropyltoluene	31.91	119	5636524	43.90	ppb		95
75)	1,4-dichlorobenzene	32.18	146	2849640	44.43	ppb		98
76)	1,2-dichlorobenzene	32.97	146	2611037	40.86	ppb		99
77)	n-butylbenzene	32.74	91	6243860	50.04	ppb		93
78)	1,2-dibromo-3-chloropropan	34.53	75	211418	37.19	ppb		93
79)	1,2,4-trichlorobenzene	36.49	180	1404333	68.68	ppb		98
80)	hexachlorobutadiene	36.82	225	930196	44.85	ppb		95
81)	naphthalene	37.17	128	2560317	63.00	ppb		100
82)	1,2,3-trichlorobenzene	37.82	180	994514	73.82	ppb		97
1)	hexachloroethane	33.53	201	528880	51.88	ug/l	#	100

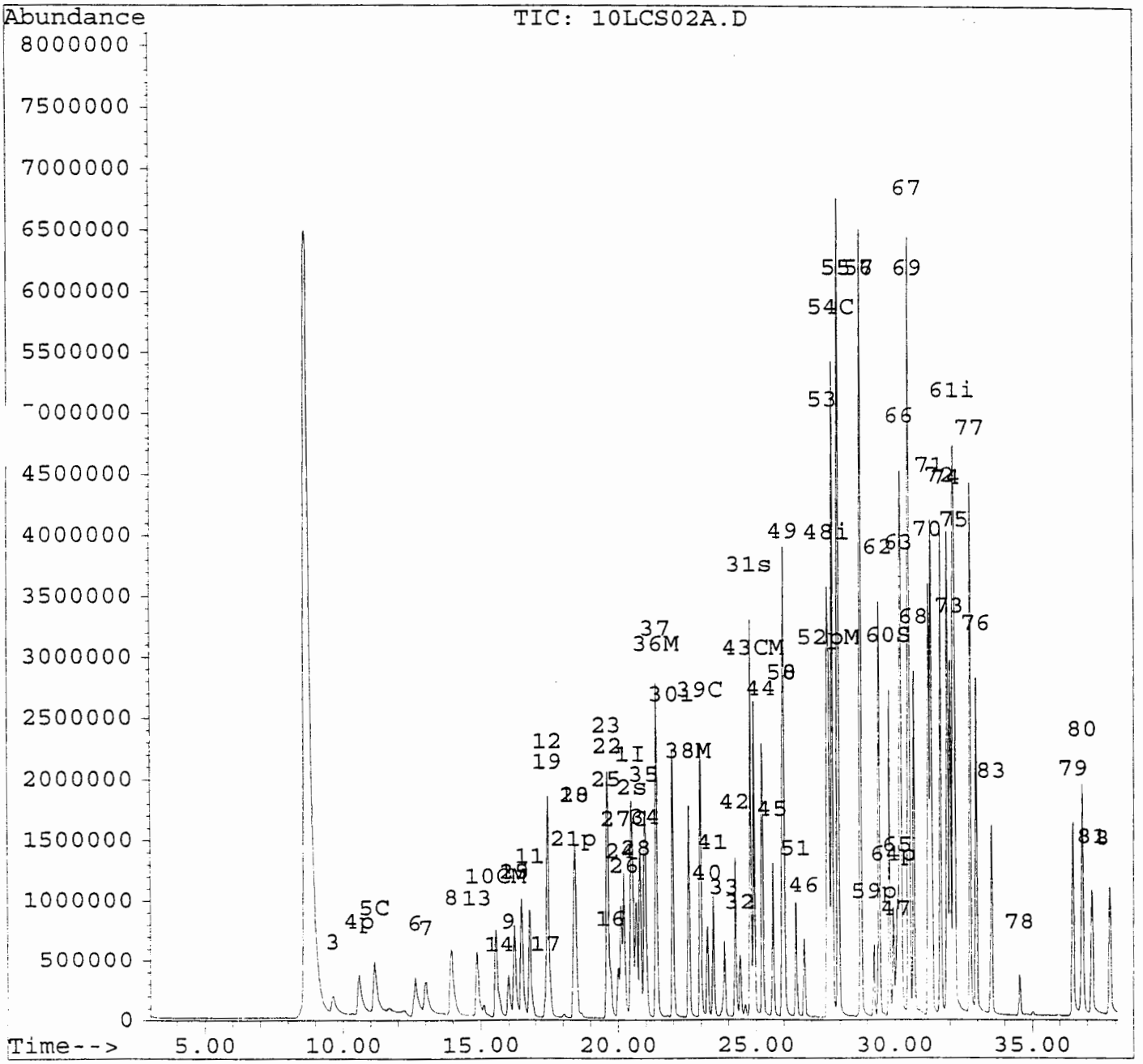
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\10LCS02A.D
Acq On : 2 Oct 98 5:10 pm
Sample : lcs 50 ppb
Misc :
Quant Time: Oct 2 17:48 1998

Vial: 2
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\10LCS05A.D Vial: 2
Acq On : 5 Oct 98 3:12 pm Operator:
Sample : LCS 50 PPB Inst : 5972-INST
Misc : Multiplr: 1.00
Quant Time: Oct 5 15:46 1998

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	17.79	168	4141111	50.00 ppb		0.09
30) 1,4-Difluorobenzene	19.01	114	5222901	50.00 ppb		0.09
48) Chlorobenzene-d5	23.43	117	4811712	50.00 ppb		0.09
61) 1,4-dichlorobenzene-d4	26.88	152	2752335	50.00 ppb		0.09
System Monitoring Compounds						**%Recovery**
2) Dibromofluoromethane	17.81	113	2636357	52.51 ppb		105.02%
31) Toluene-d8	21.24	98	5438449	52.09 ppb		104.17%
60) 4-bromofluorobenzene	25.15	95	2892550	50.09 ppb		100.17%
Target Compounds						**Qvalue**
3) dichlorodifluoromethane	7.30	85	2141871	37.05 ppb		99
4) chloromethane	8.17	50	1120599	47.21 ppb		98
5) vinyl chloride	8.70	62	1059722	52.50 ppb		100
6) bromomethane	10.20	94	334258	50.73 ppb		98
7) chloroethane	10.72	64	277006	55.07 ppb		96
8) trichlorofluoromethane	11.39	101	1842515	53.06 ppb		99
9) Methyliodide	13.53	142	2344242	54.29 ppb		98
10) 1,1-dichloroethene	13.05	96	748044	52.98 ppb		91
11) methylene chloride	14.43	84	1645365	69.95 ppb		92
12) trans-1,2-dichloroethene	14.94	96	1637501	48.46 ppb		99
13) Ethylether	12.41	74	314412	49.79 ppb		100
14) Acetone	13.42	43	362765	37.45 ppb		95
15) Carbondisulfide	13.63	76	2462451	52.78 ppb		99
16) Acrolein	17.14	55	1184628	41.84 ppb		100
17) Acrylonitrile	15.14	52	370274	42.34 ppb		100
18) Diisopropylether	15.84	87	1459312	45.70 ppb		70
19) Methyl-tert-butyl Ether (M	14.91	73	2195224	42.07 ppb	#	100
20) Vinylacetate	14.15	43	357440	43.40 ppb		100
21) 1,1-dichloroethane	15.92	63	3248911	46.27 ppb		98
22) 2,2-dichloropropane	16.96	77	1698153	49.44 ppb		96
23) cis-1,2-dichloroethene	17.01	96	1666587	46.75 ppb		88
24) bromochloromethane	17.45	128	998369	47.36 ppb	#	86
25) 2-Butanone (MEK)	17.05	72	178138	39.91 ppb	#	100
26) Tetrahydrofuran	17.49	72	150263	40.82 ppb	#	1
27) chloroform	17.52	83	3143555	45.91 ppb		96
28) 1,1,1-trichloroethane	17.83	97	2505895	48.21 ppb		88
29) Allyl chloride	13.63	76	2446685	53.20 ppb	#	98
32) 4-Methyl-2-pentanone (MIBK	21.03	43	1405484	40.43 ppb	#	78
33) 2-Chloroethyl Vinyl Ether	20.58	63	661459	51.53 ppb		100
34) carbon tetrachloride	18.04	117	2391599	51.81 ppb		94
35) 1,1-dichloropropene	18.07	75	2411487	53.06 ppb		88
36) benzene	18.43	78	5291630	46.77 ppb		96
37) 1,2-dichloroethane	18.55	62	2145906	45.32 ppb		93

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\10LCS05A.D Vial: 2
Acq On : 5 Oct 98 3:12 pm Operator:
Sample : LCS 50 PPB Inst : 5972-INST
Misc : Multiplr: 1.00
Quant Time: Oct 5 15:46 1998

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	trichloroethene	19.42	95	1949329	45.15 ppb	#	72
39)	1,2-dichloropropane	19.86	63	1775115	48.19 ppb		79
40)	dibromomethane	20.05	93	1326033	46.38 ppb		97
41)	bromodichloromethane	20.23	83	2506764	45.82 ppb		97
42)	cis-1,3-dichloropropene	20.88	75	2456827	48.73 ppb		71
43)	toluene	21.33	92	3293130	46.87 ppb		100
44)	trans-1,3-dichloropropene	21.70	75	1938184	48.84 ppb		88
45)	1,1,2-trichloroethane	22.00	83	1203949	43.39 ppb	#	70
46)	1,2-Dibromoethane	22.83	107	1732075	45.05 ppb		99
47)	1,4-dichloro-2-butene	25.39	53	255301	59.55 ppb	#	10
49)	tetrachloroethene	22.12	166	2515470	37.54 ppb	#	84
50)	1,3-dichloropropane	22.26	76	2229148	43.81 ppb		98
51)	dibromochloromethane	22.60	129	2016671	44.53 ppb		97
52)	chlorobenzene	23.48	112	4185891	47.52 ppb		83
53)	1,1,1,2-tetrachloroethane	23.57	131	1838450	49.22 ppb		96
54)	ethylbenzene	23.52	91	6586830	46.83 ppb		99
5)	para & meta xylene	23.68	106	5000865	102.74 ppb		98
56)	ortho xylene	24.30	106	2539236	51.08 ppb		99
57)	styrene	24.32	104	4217324	52.44 ppb		97
58)	2-Hexanone (MBK)	22.23	43	1309700	40.92 ppb	#	68
59)	bromoform	24.72	173	1319677	42.94 ppb		97
62)	Isopropyl benzene	24.79	105	6801780	46.75 ppb	#	77
63)	bromobenzene	25.43	156	2062995	46.60 ppb	#	1
64)	1,1,2,2-tetrachloroethane	25.31	83	1948135	39.57 ppb	#	1
65)	1,2,3-trichloropropane	25.43	75	2040425	45.28 ppb	#	1
66)	n-propylbenzene	25.39	91	8447110	47.35 ppb		85
67)	2-chlorotoluene	25.64	91	5608849	46.73 ppb		97
68)	4-chlorotoluene	25.80	91	4939339	43.42 ppb		97
69)	1,3,5-trimethylbenzene	25.62	105	5647742	48.73 ppb	#	1
70)	tert-butylbenzene	26.14	119	5960759	48.12 ppb		97
71)	1,2,4-trimethylbenzene	26.22	105	5855343	48.11 ppb		75
72)	sec-butylbenzene	26.45	105	7921348	49.73 ppb		98
73)	1,3-dichlorobenzene	26.79	146	3499754	45.77 ppb		91
74)	p-isopropyltoluene	26.63	119	6560454	46.48 ppb	#	30
75)	1,4-dichlorobenzene	26.91	146	3717661	45.53 ppb		99
76)	1,2-dichlorobenzene	27.52	146	3320300	44.49 ppb	#	100
77)	n-butylbenzene	27.25	91	6493519	49.06 ppb	#	100
78)	1,2-dibromo-3-chloropropan	28.70	75	387766	50.63 ppb	#	1
79)	1,2,4-trichlorobenzene	29.97	180	2757175	44.53 ppb	#	100
80)	hexachlorobutadiene	30.10	225	1674430	44.31 ppb		96
81)	naphthalene	30.45	128	4870298	40.97 ppb		100
82)	1,2,3-trichlorobenzene	30.88	180	2567474	45.06 ppb		100
3)	hexachloroethane	27.85	201	808090	55.69 ppb	#	100
4)	2-methylnapthalene	32.56	142	2948117	39.38 ppb		97

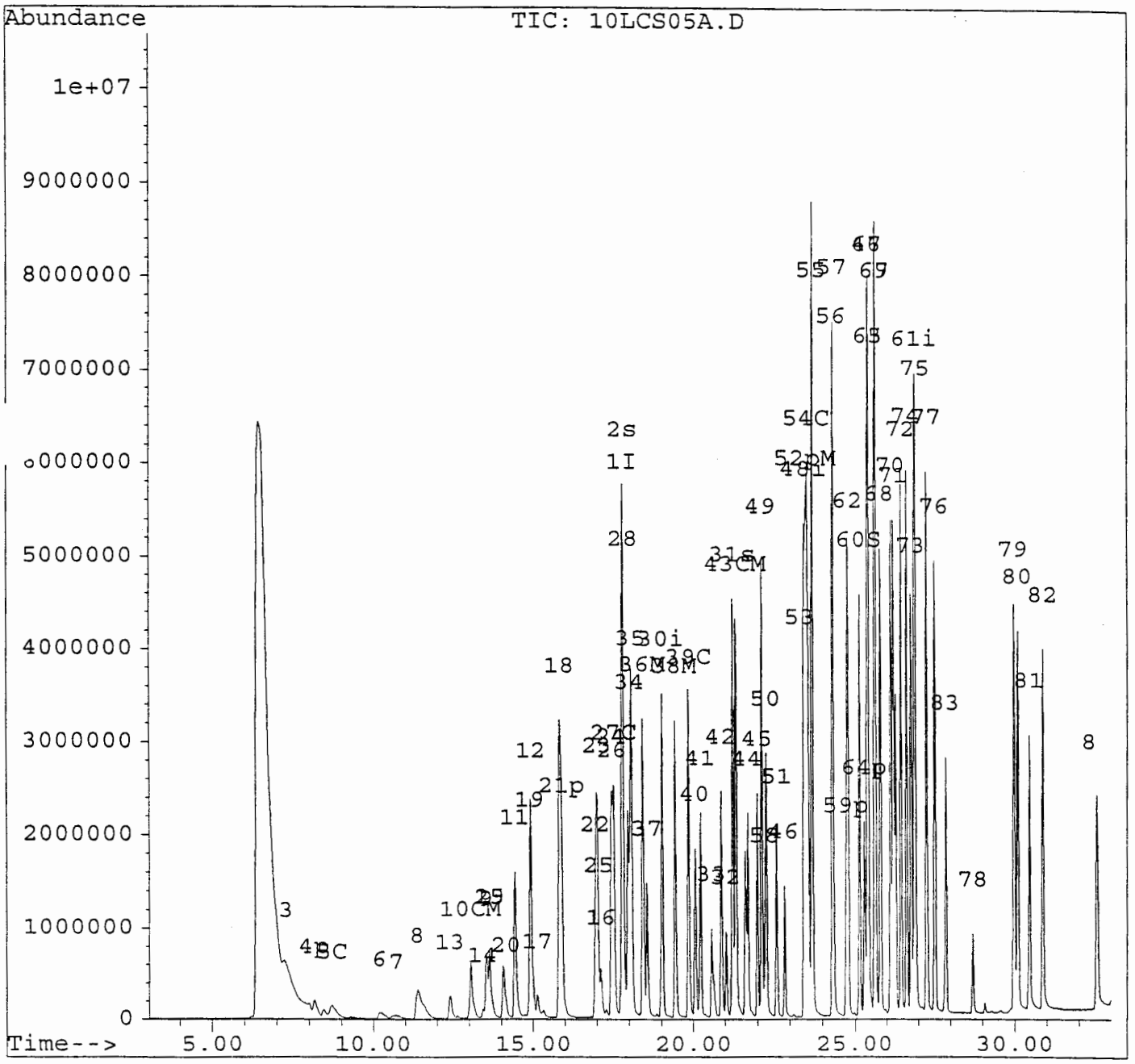
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\10LCS05A.D
Acq On : 5 Oct 98 3:12 pm
Sample : LCS 50 PPB
Misc :
Quant Time: Oct 5 15:46 1998

Vial: 2
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\8707MS.D Vial: 15
Acq On : 2 Oct 98 6:59 pm Operator:
Sample : 84475-8707 10 x tclp ms Inst : 5972-INST
Misc : Multiplr: 1.00
Quant Time: Oct 2 19:33 1998

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	17.76	168	3168096	50.00 ppb		0.05
30) 1,4-Difluorobenzene	18.98	114	4366220	50.00 ppb		0.05
48) Chlorobenzene-d5	23.40	117	4154658	50.00 ppb		0.05
61) 1,4-dichlorobenzene-d4	26.84	152	2400622	50.00 ppb		0.05
System Monitoring Compounds						**%Recovery**
2) Dibromofluoromethane	17.77	113	2378854	61.93 ppb		123.87%
31) Toluene-d8	21.19	98	4684143	53.66 ppb		107.33%
60) 4-bromofluorobenzene	25.11	95	2548776	51.11 ppb		102.22%
Target Compounds						**Qvalue**
3) dichlorodifluoromethane	7.27	85	731093	16.53 ppb		99
4) chloromethane	8.14	50	726691	40.02 ppb		97
5) vinyl chloride	8.67	62	836244	54.16 ppb		99
6) bromomethane	10.15	94	192255	38.14 ppb		96
7) chloroethane	10.63	64	153707	39.94 ppb		99
8) trichlorofluoromethane	11.35	101	1344058	50.59 ppb		100
9) Methyliodide	13.49	142	1969937	59.64 ppb		99
10) 1,1-dichloroethene	13.02	96	630578	58.38 ppb		90
11) methylene chloride	14.40	84	1458707	81.06 ppb	#	87
12) trans-1,2-dichloroethene	14.89	96	1307994	50.60 ppb		91
13) Ethylether	12.38	74	294082	60.87 ppb		100
14) Acetone	13.39	43	186658	25.19 ppb		94
15) Carbondisulfide	13.58	76	2080459	58.28 ppb		99
16) Acrolein	17.08	55	1039634	47.99 ppb		100
17) Acrylonitrile	15.10	52	316837	47.36 ppb		100
18) Diisopropylether	15.81	87	594720	24.34 ppb	#	54
19) Methyl-tert-butyl Ether (M	14.87	73	2080222	52.11 ppb	#	100
20) Vinylacetate	14.11	43	470547	74.68 ppb		100
21) 1,1-dichloroethane	15.86	63	2734194	50.90 ppb		98
22) 2,2-dichloropropane	16.92	77	1275366	48.54 ppb		96
23) cis-1,2-dichloroethene	16.96	96	1394848	51.15 ppb	#	80
24) bromochloromethane	17.40	128	840865	52.14 ppb	#	68
25) 2-Butanone (MEK)	17.01	72	115373	33.78 ppb	#	100
26) Tetrahydrofuran	17.45	72	127336	45.21 ppb	#	1
27) chloroform	17.49	83	2713476	51.80 ppb		96
28) 1,1,1-trichloroethane	17.77	97	2042573	51.37 ppb	#	66
29) Allyl chloride	13.58	76	2067208	58.76 ppb	#	98
32) 4-Methyl-2-pentanone (MIBK	20.99	43	1269536	43.69 ppb	#	78
33) 2-Chloroethyl Vinyl Ether	20.55	63	509069	47.44 ppb		100
34) carbon tetrachloride	18.00	117	1804405	46.76 ppb		94
35) 1,1-dichloropropene	18.04	75	1884218	49.59 ppb		87
36) benzene	18.39	78	4429159	46.83 ppb		97
7) 1,2-dichloroethane	18.52	62	1960712	49.53 ppb		94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\8707MS.D
Acq On : 2 Oct 98 6:59 pm
Sample : 84475-8707 10 x tclp ms
Misc :
Quant Time: Oct 2 19:33 1998

Vial: 15
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	trichloroethene	19.38	95	1608588	44.57 ppb	#	74
39)	1,2-dichloropropane	19.81	63	1598369	51.90 ppb		78
40)	dibromomethane	20.02	93	1162338	48.63 ppb		97
41)	bromodichloromethane	20.20	83	2204115	48.19 ppb		97
42)	cis-1,3-dichloropropene	20.85	75	2114937	50.18 ppb		70
43)	toluene	21.29	92	2752052	46.85 ppb		100
44)	trans-1,3-dichloropropene	21.66	75	1684578	50.78 ppb		87
45)	1,1,2-trichloroethane	21.96	83	1078980	46.52 ppb	#	68
46)	1,2-Dibromoethane	22.79	107	1495047	46.52 ppb		100
47)	1,4-dichloro-2-butene	25.36	53	211133	58.91 ppb	#	8
49)	tetrachloroethene	22.09	166	2022851	34.96 ppb		86
50)	1,3-dichloropropane	22.23	76	1999618	45.52 ppb		98
51)	dibromochloromethane	22.56	129	1725122	44.11 ppb		97
52)	chlorobenzene	23.45	112	3609753	47.46 ppb	#	81
53)	1,1,1,2-tetrachloroethane	23.54	131	1557514	48.29 ppb		96
54)	ethylbenzene	23.48	91	5560647	45.79 ppb		99
5)	para & meta xylene	23.64	106	4222025	100.46 ppb		90
56)	ortho xylene	24.26	106	2173506	50.64 ppb		98
57)	styrene	24.30	104	3683562	53.05 ppb		98
58)	2-Hexanone (MBK)	22.19	43	923769	33.43 ppb	#	72
59)	bromoform	24.70	173	1089217	41.04 ppb		96
62)	Isopropyl benzene	24.76	105	5641784	44.46 ppb	#	76
63)	bromobenzene	25.39	156	1792955	46.43 ppb	#	1
64)	1,1,2,2-tetrachloroethane	25.27	83	1738409	40.48 ppb	#	1
65)	1,2,3-trichloropropane	25.41	75	1811357	46.09 ppb	#	1
66)	n-propylbenzene	25.36	91	7095351	45.60 ppb		81
67)	2-chlorotoluene	25.61	91	4977870	47.55 ppb	#	87
68)	4-chlorotoluene	25.77	91	4216719	42.50 ppb	#	86
69)	1,3,5-trimethylbenzene	25.59	105	4850072	47.98 ppb	#	1
70)	tert-butylbenzene	26.10	119	4095751	37.91 ppb		99
71)	1,2,4-trimethylbenzene	26.19	105	4976782	46.89 ppb		77
72)	sec-butylbenzene	26.42	105	6350234	45.71 ppb		94
73)	1,3-dichlorobenzene	26.76	146	2990660	44.84 ppb		93
74)	p-isopropyltoluene	26.60	119	5320183	43.22 ppb	#	29
75)	1,4-dichlorobenzene	26.88	146	3188122	44.76 ppb	#	1
76)	1,2-dichlorobenzene	27.48	146	2951038	45.33 ppb	#	100
77)	n-butylbenzene	27.23	91	5291603	45.84 ppb	#	100
78)	1,2-dibromo-3-chloropropan	28.68	75	331947	49.69 ppb	#	1
79)	1,2,4-trichlorobenzene	29.94	180	2318545	42.93 ppb	#	100
80)	hexachlorobutadiene	30.06	225	1095502	33.24 ppb		98
81)	naphthalene	30.43	128	4100804	39.55 ppb		100
82)	1,2,3-trichlorobenzene	30.84	180	2141551	43.10 ppb		99
3)	hexachloroethane	27.83	201	588151	46.47 ppb	#	100
4)	2-methylnapthalene	32.52	142	2073210	31.75 ppb		97

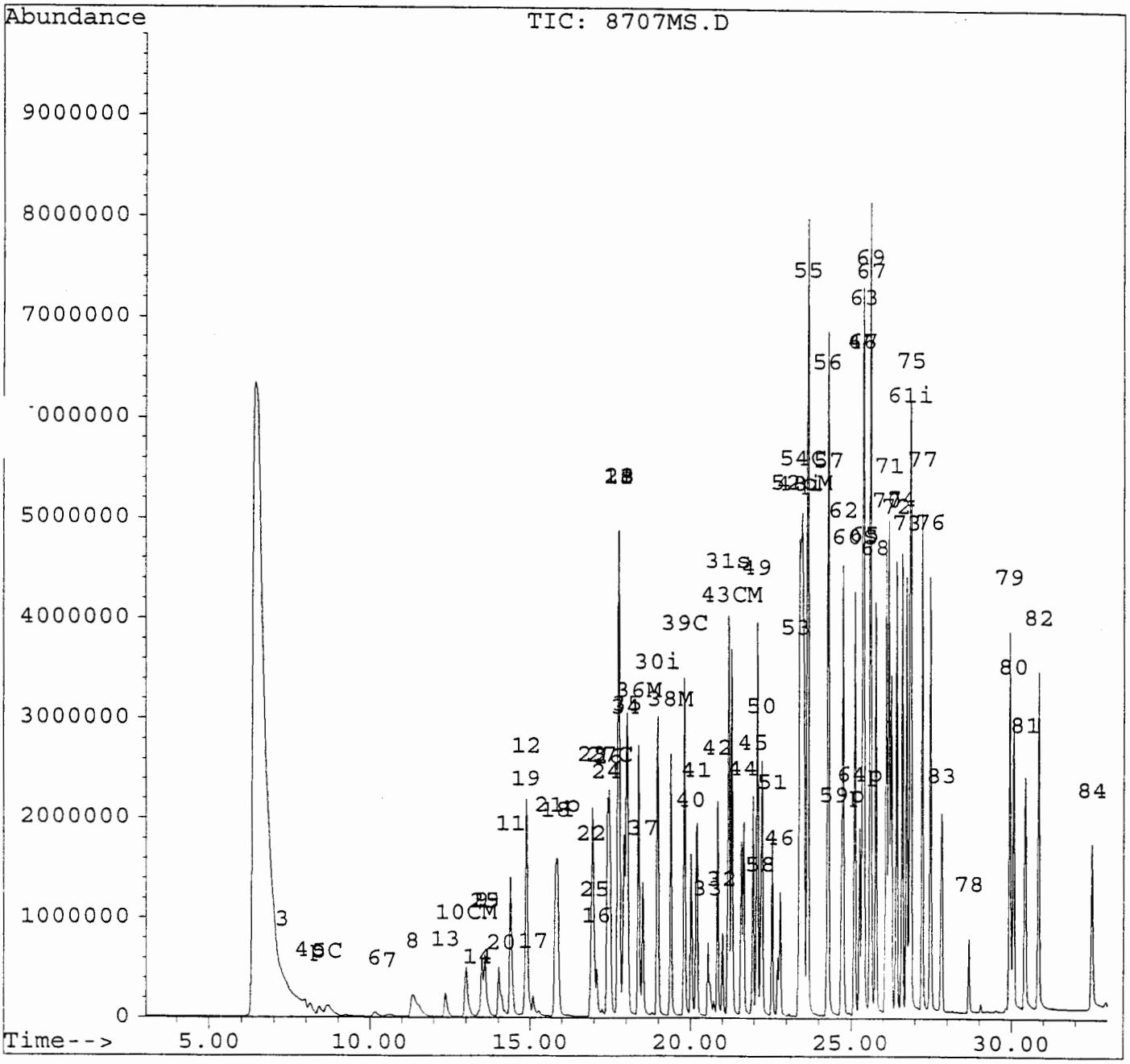
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\8707MS.D
Acq On : 2 Oct 98 6:59 pm
Sample : 84475-8707 10 x tclp ms
Misc :
Quant Time: Oct 2 19:33 1998

Vial: 15
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\8707MSD.D
Acq On : 2 Oct 98 7:40 pm
Sample : 84475-8707 10 x tclp msd
Misc :
Quant Time: Oct 2 20:16 1998

Vial: 16
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	17.76	168	3538455	50.00 ppb	0.06
30) 1,4-Difluorobenzene	18.98	114	4743468	50.00 ppb	0.06
48) Chlorobenzene-d5	23.40	117	4408617	50.00 ppb	0.06
61) 1,4-dichlorobenzene-d4	26.83	152	2481321	50.00 ppb	0.04
System Monitoring Compounds					**%Recovery**
2) Dibromofluoromethane	17.77	113	2493270	58.12 ppb	116.23%
31) Toluene-d8	21.19	98	4904861	51.72 ppb	103.45%
60) 4-bromofluorobenzene	25.10	95	2677456	50.60 ppb	101.20%
Target Compounds					**Qvalue**
3) dichlorodifluoromethane	7.24	85	846021	17.13 ppb	100
4) chloromethane	8.12	50	687439	33.89 ppb	98
5) vinyl chloride	8.67	62	743889	43.13 ppb	99
6) bromomethane	10.15	94	249814	44.37 ppb	97
7) chloroethane	10.63	64	198794	46.25 ppb	100
8) trichlorofluoromethane	11.36	101	1388836	46.81 ppb	100
9) Methyliodide	13.50	142	1980408	53.68 ppb	99
10) 1,1-dichloroethene	13.00	96	619950	51.39 ppb	93
11) methylene chloride	14.38	84	1588220	79.02 ppb	91
12) trans-1,2-dichloroethene	14.89	96	1393856	48.28 ppb	95
13) Ethylether	12.36	74	302358	56.04 ppb	100
14) Acetone	13.39	43	202921	24.52 ppb	95
15) Carbondisulfide	13.58	76	2017603	50.61 ppb	99
16) Acrolein	17.08	55	1191693	49.25 ppb	100
17) Acrylonitrile	15.10	52	364625	48.80 ppb	100
18) Diisopropylether	15.81	87	670856	24.59 ppb	71
19) Methyl-tert-butyl Ether (M	14.87	73	2347838	52.66 ppb #	100
20) Vinylacetate	14.10	43	414781	58.94 ppb	100
21) 1,1-dichloroethane	15.86	63	2934551	48.91 ppb	98
22) 2,2-dichloropropane	16.93	77	1373879	46.82 ppb	94
23) cis-1,2-dichloroethene	16.96	96	1524891	50.06 ppb #	84
24) bromochloromethane	17.40	128	952915	52.90 ppb #	77
25) 2-Butanone (MEK)	17.00	72	130563	34.23 ppb #	100
26) Tetrahydrofuran	17.44	72	145708	46.32 ppb #	1
27) chloroform	17.49	83	2916509	49.85 ppb	96
28) 1,1,1-trichloroethane	17.77	97	2172548	48.92 ppb #	72
29) Allyl chloride	13.58	76	2003312	50.98 ppb #	98
32) 4-Methyl-2-pentanone (MIBK	20.99	43	1464566	46.39 ppb #	78
33) 2-Chloroethyl Vinyl Ether	20.55	63	567901	48.72 ppb	100
34) carbon tetrachloride	18.00	117	1968675	46.96 ppb	94
35) 1,1-dichloropropene	18.02	75	2042459	49.48 ppb	86
6) benzene	18.39	78	4857794	47.28 ppb	97
7) 1,2-dichloroethane	18.52	62	2142605	49.82 ppb	92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\8707MSD.D Vial: 16
Acq On : 2 Oct 98 7:40 pm Operator:
Sample : 84475-8707 10 x tclp msd Inst : 5972-INST
Misc : Multiplr: 1.00
Quant Time: Oct 2 20:16 1998

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	trichloroethene	19.38	95	1734142	44.23 ppb	#	70
39)	1,2-dichloropropane	19.81	63	1736161	51.89 ppb		78
40)	dibromomethane	20.02	93	1298372	50.00 ppb		94
41)	bromodichloromethane	20.18	83	2454391	49.39 ppb		96
42)	cis-1,3-dichloropropene	20.83	75	2341814	51.14 ppb		68
43)	toluene	21.29	92	2962784	46.43 ppb		100
44)	trans-1,3-dichloropropene	21.66	75	1864563	51.74 ppb		89
45)	1,1,2-trichloroethane	21.95	83	1218520	48.36 ppb	#	67
46)	1,2-Dibromoethane	22.80	107	1724367	49.39 ppb		100
47)	1,4-dichloro-2-butene	25.34	53	230091	59.09 ppb	#	9
49)	tetrachloroethene	22.09	166	2182060	35.54 ppb	#	84
50)	1,3-dichloropropane	22.23	76	2256630	48.41 ppb		98
51)	dibromochloromethane	22.55	129	1981639	47.75 ppb		98
52)	chlorobenzene	23.43	112	3933317	48.74 ppb	#	82
53)	1,1,1,2-tetrachloroethane	23.52	131	1760229	51.43 ppb		96
54)	ethylbenzene	23.47	91	6014315	46.67 ppb		98
5)	para & meta xylene	23.65	106	4578441	102.66 ppb	#	86
56)	ortho xylene	24.25	106	2353657	51.68 ppb		98
57)	styrene	24.28	104	4006429	54.37 ppb		99
58)	2-Hexanone (MBK)	22.20	43	1081157	36.87 ppb	#	71
59)	bromoform	24.69	173	1280401	45.47 ppb		96
62)	Isopropyl benzene	24.74	105	6060308	46.20 ppb	#	77
63)	bromobenzene	25.38	156	1982412	49.67 ppb	#	1
64)	1,1,2,2-tetrachloroethane	25.25	83	1974279	44.48 ppb	#	1
65)	1,2,3-trichloropropane	25.40	75	2011346	49.52 ppb	#	1
66)	n-propylbenzene	25.34	91	7561836	47.02 ppb		82
67)	2-chlorotoluene	25.59	91	5263508	48.64 ppb	#	86
68)	4-chlorotoluene	25.75	91	4523590	44.11 ppb	#	86
69)	1,3,5-trimethylbenzene	25.57	105	5162774	49.42 ppb	#	1
70)	tert-butylbenzene	26.09	119	4650743	41.64 ppb		100
71)	1,2,4-trimethylbenzene	26.17	105	5393067	49.15 ppb		76
72)	sec-butylbenzene	26.40	105	6880987	47.92 ppb		95
73)	1,3-dichlorobenzene	26.74	146	3240943	47.02 ppb		92
74)	p-isopropyltoluene	26.58	119	5701635	44.81 ppb	#	30
75)	1,4-dichlorobenzene	26.86	146	3432373	46.62 ppb	#	1
76)	1,2-dichlorobenzene	27.46	146	3216938	47.81 ppb	#	100
77)	n-butylbenzene	27.22	91	5702358	47.79 ppb	#	100
78)	1,2-dibromo-3-chloropropan	28.65	75	383440	55.53 ppb	#	1
79)	1,2,4-trichlorobenzene	29.92	180	2528312	45.29 ppb	#	100
80)	hexachlorobutadiene	30.05	225	1337646	39.27 ppb		95
81)	naphthalene	30.40	128	4683508	43.70 ppb		100
82)	1,2,3-trichlorobenzene	30.82	180	2372390	46.19 ppb		100
3)	hexachloroethane	27.80	201	675554	51.64 ppb	#	100
84)	2-methylnapthalene	32.49	142	2472589	36.64 ppb		97

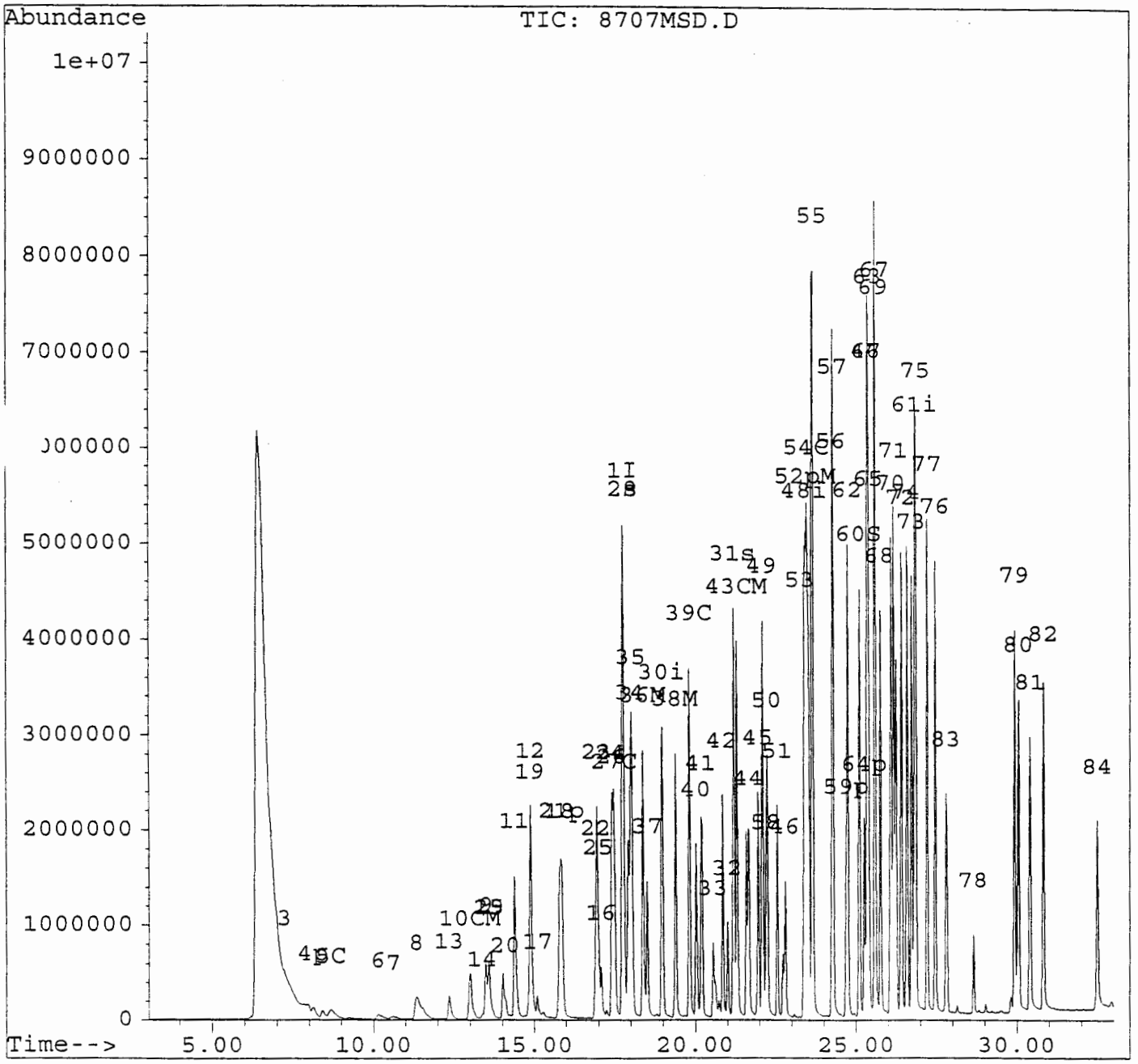
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L02OCT98\8707MSD.D
Acq On : 2 Oct 98 7:40 pm
Sample : 84475-8707 10 x tclp msd
Misc :
Quant Time: Oct 2 20:16 1998

Vial: 16
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 13:18:28 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\8693MS.D
Acq On : 3 Oct 98 2:43 am
Sample : 84468-8693 10 x tclp ms
Misc :
Quant Time: Oct 3 3:21 1998

Vial: 15
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentafluorobenzene	20.45	168	782461	50.00 ppb	-0.05
30) 1,4-Difluorobenzene	21.97	114	1343577	50.00 ppb	-0.03
48) Chlorobenzene-d5	27.56	117	1439485	50.00 ppb	-0.05
61) 1,4-dichlorobenzene-d4	32.12	152	1088675	50.00 ppb	-0.02
System Monitoring Compounds					**%Recovery**
2) Dibromofluoromethane	20.51	113	533538	57.06 ppb	114.12%
31) Toluene-d8	24.78	98	1448012	50.38 ppb	100.75%
60) 4-bromofluorobenzene	29.78	95	819425	55.46 ppb	110.92%
Target Compounds					**Qvalue**
3) dichlorodifluoromethane	9.63	85	191261	19.06 ppb	96
4) chloromethane	10.57	50	399340	14.51 ppb	95
5) vinyl chloride	11.15	62	474324	38.26 ppb	100
6) bromomethane	12.59	94	257597	30.91 ppb	97
7) chloroethane	12.97	64	411322	59.49 ppb	97
8) trichlorofluoromethane	13.92	101	683566	54.21 ppb	99
9) Methyliodide	15.98	142	520215	44.68 ppb	96
10) 1,1-dichloroethene	15.53	96	287759	42.84 ppb	95
11) methylene chloride	16.77	84	377851	31.35 ppb	90
12) trans-1,2-dichloroethene	17.44	96	353833	46.56 ppb	99
13) Ethylether	14.86	74	241647	53.42 ppb	100
14) Acetone	15.68	43	139500	39.00 ppb	100
15) Carbondisulfide	16.21	76	1070801	39.03 ppb	99
16) Acrolein	19.72	55	293464	46.19 ppb	100
17) Acrylonitrile	17.33	52	92460	43.57 ppb	100
18) Diisopropylether	18.44	87	190041	23.91 ppb #	53
19) Methyl-tert-butyl Ether (M	17.42	73	914428	53.02 ppb	97
20) Vinylacetate	18.44	43	525500	25.05 ppb	100
21) 1,1-dichloroethane	18.38	63	822889	48.39 ppb	97
22) 2,2-dichloropropane	19.62	77	547324	52.11 ppb	98
23) cis-1,2-dichloroethene	19.59	96	388843	49.38 ppb	95
24) bromochloromethane	20.09	128	194851	51.27 ppb #	61
25) 2-Butanone (MEK)	19.57	72	35606	40.66 ppb	97
26) Tetrahydrofuran	20.22	72	35990	47.68 ppb #	77
27) chloroform	20.19	83	719433	54.18 ppb	95
28) 1,1,1-trichloroethane	20.65	97	614096	57.36 ppb	91
29) Allyl chloride	16.21	76	1070801	39.03 ppb #	98
32) 4-Methyl-2-pentanone (MIBK	24.41	43	385044	48.64 ppb #	96
33) 2-Chloroethyl Vinyl Ether	23.85	63	244942	60.00 ppb	100
34) carbon tetrachloride	21.00	117	432790	48.07 ppb	96
35) 1,1-dichloropropene	20.94	75	582955	51.50 ppb	99
36) benzene	21.38	78	1574858	45.67 ppb	95
37) 1,2-dichloroethane	21.35	62	577157	58.17 ppb	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\8693MS.D
Acq On : 3 Oct 98 2:43 am
Sample : 84468-8693 10 x tclp ms
Misc :
Quant Time: Oct 3 3:21 1998

Vial: 15
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	trichloroethene	22.54	95	490700	50.13	ppb		98
39)	1,2-dichloropropane	22.97	63	553580	50.99	ppbL		95
40)	dibromomethane	23.22	93	291174	52.55	ppb	#	75
41)	bromodichloromethane	23.44	83	609576	55.67	ppb		97
42)	cis-1,3-dichloropropene	24.24	75	636746	50.10	ppb		96
43)	toluene	24.92	92	934936	48.81	ppb		94
44)	trans-1,3-dichloropropene	25.21	75	605937	58.01	ppb		98
45)	1,1,2-trichloroethane	25.60	83	356130	54.71	ppb		96
46)	1,2-Dibromoethane	26.72	107	467024	63.87	ppb	#	99
47)	1,4-dichloro-2-butene	30.04	53	91520	71.99	ppb	#	8
49)	tetrachloroethene	26.00	166	1093681	66.86	ppb		90
50)	1,3-dichloropropane	25.95	76	808258	53.23	ppb		99
51)	dibromochloromethane	26.44	129	490583	54.41	ppb		99
52)	chlorobenzene	27.62	112	1308656	52.41	ppb		97
53)	1,1,1,2-tetrachloroethane	27.72	131	502023	56.09	ppb	#	80
54)	ethylbenzene	27.74	91	2271381	54.16	ppb		96
5)	para & meta xylene	27.94	106	1818270	114.08	ppb	#	79
56)	ortho xylene	28.74	106	931779	58.37	ppb	#	80
57)	styrene	28.75	104	1589963	63.42	ppb		92
58)	2-Hexanone (MBK)	25.94	43	415435	49.48	ppb	#	98
59)	bromoform	29.24	173	297016	56.16	ppb		99
62)	Isopropyl benzene	29.42	105	2403722	39.87	ppb		94
63)	bromobenzene	30.18	156	646632	41.73	ppb	#	74
64)	1,1,2,2-tetrachloroethane	29.95	83	492864	28.83	ppb		97
65)	1,2,3-trichloropropane	30.10	75	654674	36.03	ppb		80
66)	n-propylbenzene	30.22	91	3326868	40.53	ppb		100
67)	2-chlorotoluene	30.51	91	2146623	41.25	ppb		95
68)	4-chlorotoluene	30.69	91	1830240	42.55	ppb		94
69)	1,3,5-trimethylbenzene	30.53	105	2075976	40.89	ppb		88
70)	tert-butylbenzene	31.22	119	2328442	45.31	ppb		85
71)	1,2,4-trimethylbenzene	31.32	105	2215457	43.72	ppb		88
72)	sec-butylbenzene	31.66	105	3351952	46.39	ppb		99
73)	1,3-dichlorobenzene	32.01	146	1388628	48.04	ppb		98
74)	p-isopropyltoluene	31.91	119	2739552	45.67	ppb		94
75)	1,4-dichlorobenzene	32.18	146	1495594	49.91	ppb		98
76)	1,2-dichlorobenzene	32.97	146	1521621	50.97	ppb		99
77)	n-butylbenzene	32.74	91	3283560	56.32	ppb		95
78)	1,2-dibromo-3-chloropropan	34.53	75	131184	49.39	ppb		92
79)	1,2,4-trichlorobenzene	36.48	180	885577	92.71	ppb		98
80)	hexachlorobutadiene	36.82	225	573009	59.13	ppb		100
81)	naphthalene	37.16	128	1601692	84.35	ppb		100
82)	1,2,3-trichlorobenzene	37.80	180	636136	101.07	ppb		100
3)	hexachloroethane	33.53	201	265682	55.78	ug/l	#	100

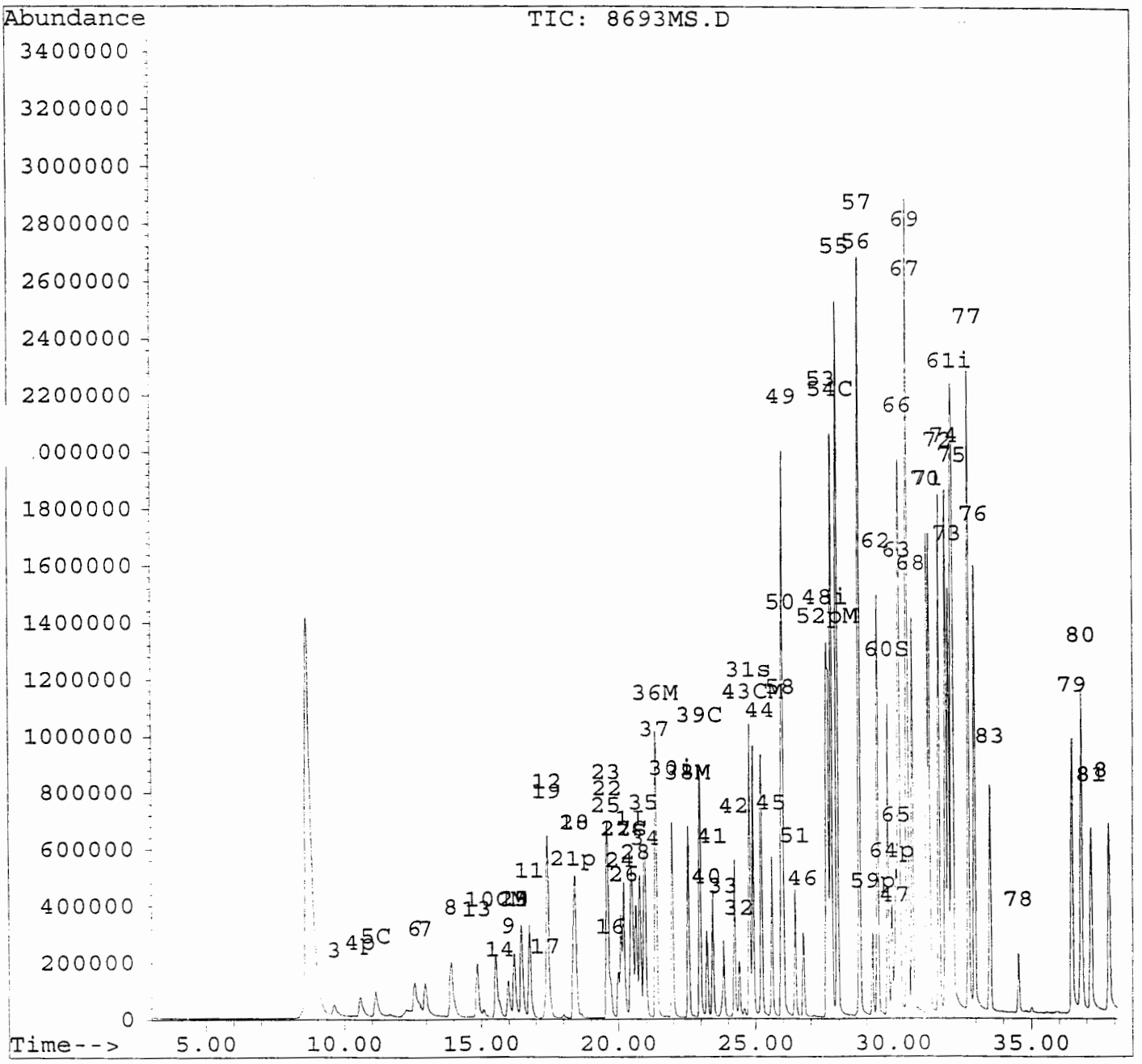
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\8693MS.D
Acq On : 3 Oct 98 2:43 am
Sample : 84468-8693 10 x tclp ms
Misc :
Quant Time: Oct 3 3:21 1998

Vial: 15
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\8693MSD.D
Acq On : 3 Oct 98 3:29 am
Sample : 84468-8693 10 x tclp msd
Misc :
Quant Time: Oct 3 4:08 1998

Vial: 16
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Pentaflucrobenzene	20.45	168	1200842	50.00 ppb	-0.05
30) 1,4-Difluorobenzene	21.95	114	1992369	50.00 ppb	-0.05
48) Chlorobenzene-d5	27.56	117	1863379	50.00 ppb	-0.05
61) 1,4-dichlorobenzene-d4	32.12	152	1266491	50.00 ppb	-0.02
System Monitoring Compounds					%Recovery
2) Dibromofluoromethane	20.51	113	761306	53.05 ppb	106.10%
31) Toluene-d8	24.78	98	2163934	50.77 ppb	101.54%
60) 4-bromofluorobenzene	29.79	95	954912	49.93 ppb	99.86%
Target Compounds					Qvalue
3) dichlorodifluoromethane	9.63	85	388871	25.25 ppb	95
4) chloromethane	10.59	50	2024440	47.93 ppb	95
5) vinyl chloride	11.13	62	1307893	68.74 ppb	100
6) bromomethane	12.57	94	396078	30.96 ppb	99
7) chloroethane	12.97	64	727632	68.57 ppb	99
8) trichlorofluoromethane	13.92	101	1152457	59.56 ppb	99
9) Methyliodide	15.98	142	832480	46.59 ppb	97
10) 1,1-dichloroethene	15.53	96	497088	48.22 ppb	93
11) methylene chloride	16.75	84	633666	34.26 ppb	95
12) trans-1,2-dichloroethene	17.44	96	590266	50.62 ppb	96
13) Ethylether	14.86	74	456248	65.72 ppb	100
14) Acetone	15.66	43	251389	45.80 ppb	94
15) Carbondisulfide	16.19	76	1545416	36.71 ppb	99
16) Acrolein	19.72	55	478841	49.11 ppb	100
17) Acrylonitrile	17.31	52	156390	48.02 ppb	100
18) Diisopropylether	18.44	87	320472	26.28 ppb #	56
19) Methyl-tert-butyl Ether (M	17.42	73	1462431	55.26 ppb	94
20) Vinylacetate	18.44	43	842012	26.15 ppb	100
21) 1,1-dichloroethane	18.38	63	1283387	49.18 ppb	98
22) 2,2-dichloropropane	19.60	77	785095	48.70 ppb	95
23) cis-1,2-dichloroethene	19.59	96	635813	52.61 ppb	99
24) bromochloromethane	20.09	128	305925	52.45 ppb #	64
25) 2-Butanone (MEK)	19.56	72	59412	44.21 ppb	96
26) Tetrahydrofuran	20.21	72	58418	50.43 ppb #	77
27) chloroform	20.19	83	1078788	52.94 ppb	93
28) 1,1,1-trichloroethane	20.63	97	813817	49.53 ppb	93
29) Allyl chloride	16.19	76	1545416	36.71 ppb #	99
32) 4-Methyl-2-pentanone (MIBK	24.41	43	582814	49.65 ppb #	96
33) 2-Chloroethyl Vinyl Ether	23.85	63	378392	62.50 ppb	100
34) carbon tetrachloride	21.00	117	587296	43.99 ppb	98
35) 1,1-dichloropropene	20.94	75	865913	51.59 ppb	99
36) benzene	21.36	78	2452111	47.95 ppb	95
37) 1,2-dichloroethane	21.35	62	781380	53.11 ppb	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\8693MSD.D
Acq On : 3 Oct 98 3:29 am
Sample : 84468-8693 10 x tclp msd
Misc :
Quant Time: Oct 3 4:08 1998

Vial: 16
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
38)	trichloroethene	22.54	95	720319	49.62	ppb		98
39)	1,2-dichloropropane	22.97	63	851343	52.89	ppbL		95
40)	dibromomethane	23.22	93	420664	51.20	ppb	#	76
41)	bromodichloromethane	23.44	83	854374	52.62	ppb		98
42)	cis-1,3-dichloropropene	24.24	75	945617	50.17	ppb		97
43)	toluene	24.92	92	1386431	48.81	ppb		93
44)	trans-1,3-dichloropropene	25.21	75	823437	53.16	ppb		97
45)	1,1,2-trichloroethane	25.60	83	477685	49.49	ppb		96
46)	1,2-Dibromoethane	26.72	107	592818	54.67	ppb	#	98
47)	1,4-dichloro-2-butene	30.04	53	104403	55.38	ppb	#	7
49)	tetrachloroethene	26.00	166	1440687	68.04	ppb		91
50)	1,3-dichloropropane	25.94	76	1089815	55.45	ppb		99
51)	dibromochloromethane	26.44	129	631178	54.08	ppb		99
52)	chlorobenzene	27.62	112	1725401	53.38	ppb		96
53)	1,1,1,2-tetrachloroethane	27.72	131	652261	56.30	ppb	#	81
54)	ethylbenzene	27.74	91	2985859	55.00	ppb		95
5)	para & meta xylene	27.94	106	2353483	114.07	ppb	#	80
56)	ortho xylene	28.74	106	1150246	55.67	ppb	#	81
57)	styrene	28.75	104	1991369	61.36	ppb		90
58)	2-Hexanone (MBK)	25.94	43	550781	50.68	ppb	#	98
59)	bromoform	29.22	173	352791	51.53	ppb		98
62)	Isopropyl benzene	29.42	105	2886437	41.16	ppb		94
63)	bromobenzene	30.18	156	759888	42.15	ppb	#	75
64)	1,1,2,2-tetrachloroethane	29.95	83	591749	29.75	ppb		96
65)	1,2,3-trichloropropane	30.10	75	758832	35.90	ppb		81
66)	n-propylbenzene	30.22	91	3917877	41.03	ppb		100
67)	2-chlorotoluene	30.51	91	2546570	42.06	ppb		94
68)	4-chlorotoluene	30.69	91	2173636	43.44	ppb		94
69)	1,3,5-trimethylbenzene	30.53	105	2473421	41.88	ppb		90
70)	tert-butylbenzene	31.22	119	2731317	45.68	ppb		85
71)	1,2,4-trimethylbenzene	31.32	105	2668566	45.27	ppb		90
72)	sec-butylbenzene	31.66	105	3935991	46.82	ppb		99
73)	1,3-dichlorobenzene	32.01	146	1644864	48.91	ppb		98
74)	p-isopropyltoluene	31.91	119	3194428	45.77	ppb		94
75)	1,4-dichlorobenzene	32.16	146	1747882	50.14	ppb		97
76)	1,2-dichlorobenzene	32.97	146	1714830	49.38	ppb		99
77)	n-butylbenzene	32.74	91	3694222	54.47	ppb		95
78)	1,2-dibromo-3-chloropropan	34.53	75	133273	43.14	ppb		96
79)	1,2,4-trichlorobenzene	36.48	180	1054429	94.88	ppb		99
80)	hexachlorobutadiene	36.82	225	546182	48.45	ppb		99
81)	naphthalene	37.16	128	2014669	91.20	ppb		100
82)	1,2,3-trichlorobenzene	37.80	180	871935	119.08	ppb		98
3)	hexachloroethane	33.53	201	276098	49.83	ug/l	#	100

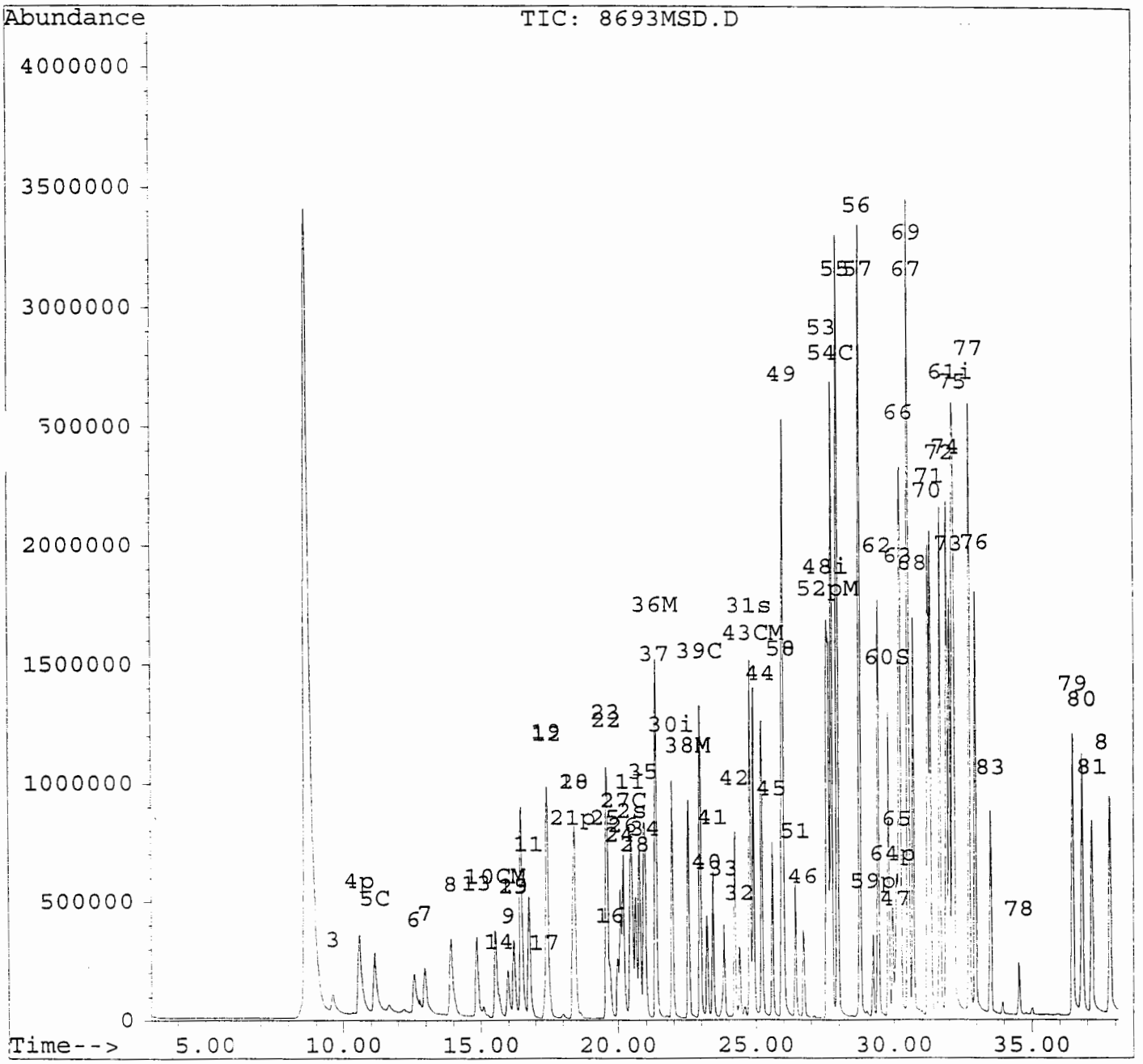
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\H02OCT98\8693MSD.D
Acq On : 3 Oct 98 3:29 am
Sample : 84468-8693 10 x tclp msd
Misc :
Quant Time: Oct 3 4:08 1998

Vial: 16
Operator: pj
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W88.M
Title : SW-8260 Purgable Organics
Last Update : Thu Oct 01 08:57:19 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\492-8744.D
Acq On : 5 Oct 98 11:58 pm
Sample : 84492~~-8743~~ ms
Misc : 8744
Quant Time: Oct 6 0:31 1998

Vial: 15
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration

10/15/98

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	17.79	168	3783721	50.00 ppb		0.09
30) 1,4-Difluorobenzene	19.01	114	4832963	50.00 ppb		0.09
48) Chlorobenzene-d5	23.43	117	4688753	50.00 ppb		0.09
61) 1,4-dichlorobenzene-d4	26.88	152	2662350	50.00 ppb		0.09
System Monitoring Compounds						%Recovery
2) Dibromofluoromethane	17.81	113	2552073	55.63 ppb		111.26%
31) Toluene-d8	21.22	98	5226209	54.09 ppb		108.18%
60) 4-bromofluorobenzene	25.15	95	2812688	49.98 ppb		99.96%
Target Compounds						Qvalue
3) dichlorodifluoromethane	7.31	85	1984275	37.56 ppb		100
4) chloromethane	8.19	50	1205487	55.58 ppb		99
5) vinyl chloride	8.72	62	1229641	66.68 ppb		99
6) bromomethane	10.21	94	359139	59.65 ppb		99
7) chloroethane	10.67	64	306401	66.67 ppb		98
8) trichlorofluoromethane	11.41	101	2003696	63.15 ppb		100
9) Methyliodide	13.55	142	2392537	60.65 ppb		98
10) 1,1-dichloroethene	13.05	96	799637	61.99 ppb		94
11) methylene chloride	14.43	84	1504002	69.98 ppb	#	84
12) trans-1,2-dichloroethene	14.94	96	1518097	49.17 ppb		93
13) Ethylether	12.42	74	322504	55.89 ppb		100
14) Acetone	13.42	43	217105	24.53 ppb		93
15) Carbondisulfide	13.64	76	2556491	59.97 ppb		100
16) Acrolein	17.12	55	1083761	41.89 ppb		100
17) Acrylonitrile	15.14	52	336616	42.13 ppb		100
18) Diisopropylether	15.85	87	1329824	45.58 ppb	#	53
19) Methyl-tert-butyl Ether (M	14.91	73	2103595	44.12 ppb	#	100
20) Vinylacetate	14.15	43	851720	113.19 ppb		100
21) 1,1-dichloroethane	15.90	63	3119099	48.62 ppb		98
22) 2,2-dichloropropane	16.96	77	1512378	48.19 ppb		97
23) cis-1,2-dichloroethene	17.01	96	1539763	47.27 ppb	#	86
24) bromochloromethane	17.46	128	891198	46.27 ppb	#	78
25) 2-Butanone (MEK)	17.05	72	122514	30.04 ppb	#	100
26) Tetrahydrofuran	17.49	72	136779	40.66 ppb	#	1
27) chloroform	17.53	83	2970399	47.48 ppb		96
28) 1,1,1-trichloroethane	17.81	97	2443372	51.45 ppb	#	63
29) Allyl chloride	13.64	76	2541231	60.48 ppb	#	99
32) 4-Methyl-2-pentanone (MIBK	21.03	43	1278703	39.75 ppb	#	78
34) carbon tetrachloride	18.04	117	2218879	51.94 ppb		95
35) 1,1-dichloropropene	18.07	75	2250251	53.50 ppb		87
36) benzene	18.43	78	4896913	46.78 ppb		96
37) 1,2-dichloroethane	18.55	62	2058551	46.98 ppb		93
38) trichloroethene	19.42	95	1841982	46.11 ppb	#	75

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\492-8744.D
Acq On : 5 Oct 98 11:58 pm
Sample : 84492-8743 ms
Misc :
Quant Time: Oct 6 0:31 1998

Vial: 15
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
39)	1,2-dichloropropane	19.86	63	1731102	50.78 ppb		78
40)	dibromomethane	20.06	93	1232520	46.59 ppb		99
41)	bromodichloromethane	20.23	83	2306765	45.56 ppb		98
42)	cis-1,3-dichloropropene	20.89	75	2228707	47.77 ppb		70
43)	toluene	21.33	92	3111317	47.85 ppb		100
44)	trans-1,3-dichloropropene	21.70	75	1788085	48.70 ppb		87
45)	1,1,2-trichloroethane	22.00	83	1149792	44.79 ppb	#	69
46)	1,2-Dibromoethane	22.83	107	1582332	44.48 ppb		99
47)	1,4-dichloro-2-butene	25.40	53	253080	63.79 ppb	#	9
49)	tetrachloroethene	22.12	166	2281951	34.95 ppb		86
50)	1,3-dichloropropane	22.27	76	2133613	43.04 ppb		98
51)	dibromochloromethane	22.60	129	1813218	41.08 ppb		97
52)	chlorobenzene	23.49	112	4107777	47.86 ppb		82
53)	1,1,1,2-tetrachloroethane	23.57	131	1714531	47.10 ppb		96
54)	ethylbenzene	23.52	91	6460555	47.14 ppb		100
55)	para & meta xylene	23.68	106	4877507	102.83 ppb		98
5)	ortho xylene	24.30	106	2443296	50.44 ppb		97
7)	styrene	24.32	104	3895323	49.71 ppb		94
58)	2-Hexanone (MBK)	22.23	43	881757	28.27 ppb	#	69
59)	bromoform	24.72	173	1173599	39.19 ppb		97
62)	Isopropyl benzene	24.79	105	6617658	47.02 ppb	#	76
63)	bromobenzene	25.43	156	1966505	45.92 ppb	#	1
64)	1,1,2,2-tetrachloroethane	25.31	83	1841065	38.66 ppb	#	1
65)	1,2,3-trichloropropane	25.43	75	2012195	46.17 ppb	#	1
66)	n-propylbenzene	25.40	91	8345530	48.36 ppb		83
67)	2-chlorotoluene	25.64	91	5556270	47.85 ppb		95
68)	4-chlorotoluene	25.80	91	4795818	43.59 ppb		95
69)	1,3,5-trimethylbenzene	25.63	105	5377991	47.97 ppb	#	1
70)	tert-butylbenzene	26.14	119	5693841	47.52 ppb		99
71)	1,2,4-trimethylbenzene	26.23	105	5535956	47.03 ppb		76
72)	sec-butylbenzene	26.46	105	7720063	50.11 ppb		96
73)	1,3-dichlorobenzene	26.79	146	3289160	44.47 ppb		92
74)	p-isopropyltoluene	26.63	119	6288232	46.06 ppb	#	30
75)	1,4-dichlorobenzene	26.92	146	3574335	45.25 ppb		97
76)	1,2-dichlorobenzene	27.52	146	3150868	43.64 ppb	#	100
77)	n-butylbenzene	27.25	91	6268254	48.96 ppb	#	100
78)	1,2-dibromo-3-chloropropan	28.70	75	355320	47.96 ppb	#	1
79)	1,2,4-trichlorobenzene	29.98	180	2506968	41.85 ppb	#	100
80)	hexachlorobutadiene	30.10	225	1316477	36.02 ppb		96
81)	naphthalene	30.45	128	4486763	39.02 ppb		100
82)	1,2,3-trichlorobenzene	30.88	180	2322469	42.14 ppb		100
83)	hexachloroethane	27.85	201	693121	49.38 ppb	#	100
1)	2-methylnapthalene	32.56	142	2556433	35.31 ppb		97

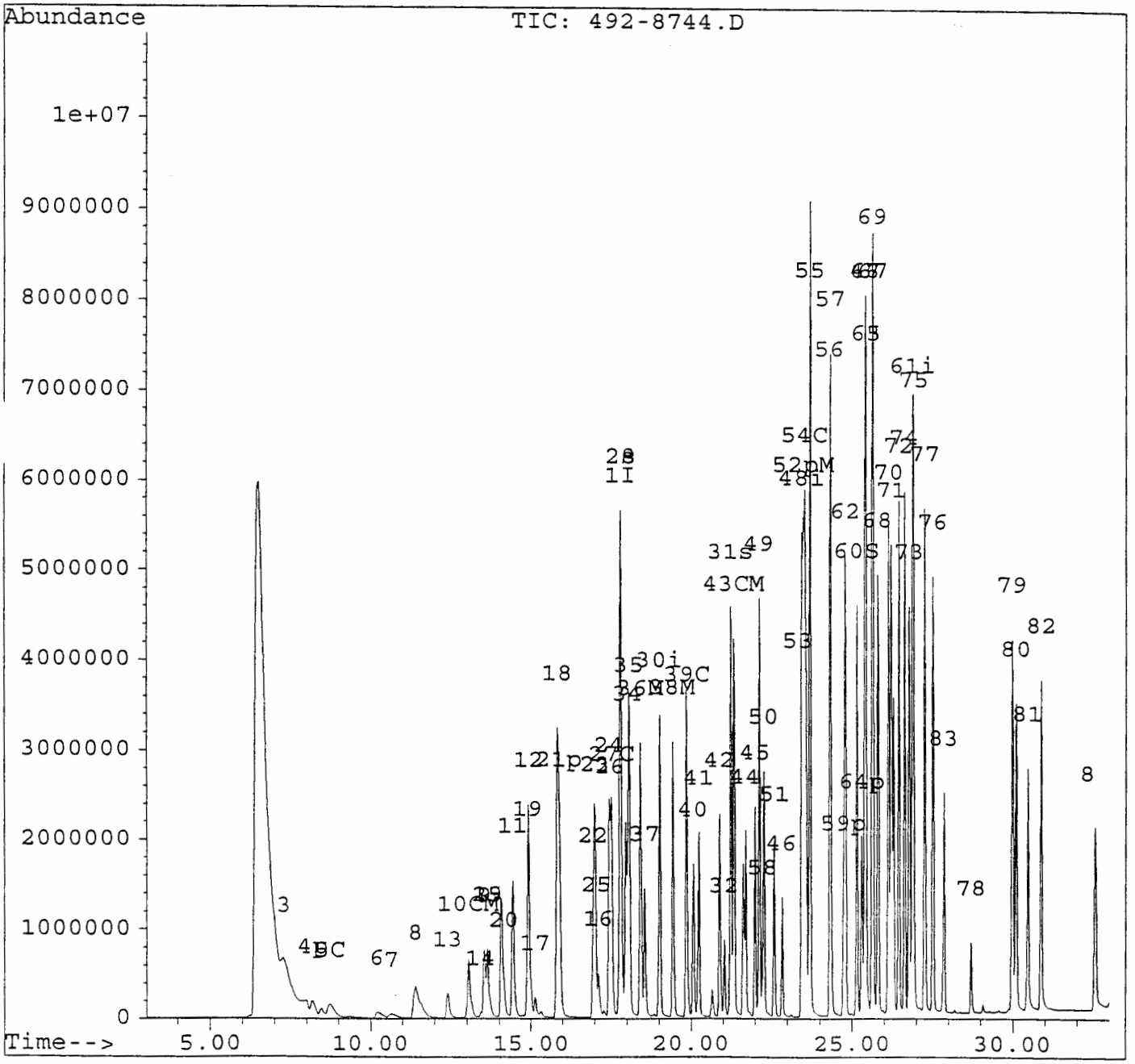
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\492-8744.D
Acq On : 5 Oct 98 11:58 pm
Sample : 84492-8743 ms
Misc :
Quant Time: Oct 6 0:31 1998

Vial: 15
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\492-8745.D
Acq On : 6 Oct 98 12:38 am
Sample : 84492-8745 msd
Misc :
Quant Time: Oct 6 1:12 1998

Vial: 16
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration

PG 10/5/98

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Pentafluorobenzene	17.79	168	3970061	50.00 ppb		0.09
30) 1,4-Difluorobenzene	19.01	114	5068211	50.00 ppb		0.09
48) Chlorobenzene-d5	23.43	117	4739437	50.00 ppb		0.09
61) 1,4-dichlorobenzene-d4	26.86	152	2666387	50.00 ppb		0.07
System Monitoring Compounds						%Recovery
2) Dibromofluoromethane	17.81	113	2574661	53.49 ppb		106.98%
31) Toluene-d8	21.22	98	5180268	51.13 ppb		102.26%
60) 4-bromofluorobenzene	25.13	95	2853709	50.17 ppb		100.33%
Target Compounds						Qvalue
3) dichlorodifluoromethane	7.30	85	2117614	38.21 ppb		100
4) chloromethane	8.17	50	1118483	49.15 ppb		98
5) vinyl chloride	8.72	62	1096870	56.69 ppb		100
6) bromomethane	10.20	94	330664	52.35 ppb		97
7) chloroethane	10.68	64	280479	58.16 ppb		100
8) trichlorofluoromethane	11.39	101	1842365	55.34 ppb		98
9) Methyliodide	13.55	142	2329918	56.29 ppb		99
10) 1,1-dichloroethene	13.05	96	781589	57.75 ppb		94
11) methylene chloride	14.43	84	1623943	72.01 ppb		90
12) trans-1,2-dichloroethene	14.94	96	1630090	50.32 ppb		97
13) Ethylether	12.41	74	317400	52.43 ppb		100
14) Acetone	13.42	43	208439	22.45 ppb		95
15) Carbondisulfide	13.63	76	2431702	54.36 ppb		100
16) Acrolein	17.12	55	1111536	40.95 ppb		100
17) Acrylonitrile	15.14	52	343222	40.94 ppb		100
18) Diisopropylether	15.84	87	1400858	45.76 ppb		66
19) Methyl-tert-butyl Ether (M	14.91	73	2267442	45.32 ppb	#	100
20) Vinylacetate	14.15	43	859175	108.82 ppb		100
21) 1,1-dichloroethane	15.92	63	3195267	47.47 ppb		98
22) 2,2-dichloropropane	16.96	77	1625016	49.35 ppb		97
23) cis-1,2-dichloroethene	17.01	96	1678258	49.11 ppb	#	88
24) bromochloromethane	17.45	128	970229	48.01 ppb	#	83
25) 2-Butanone (MEK)	17.05	72	132108	30.87 ppb	#	100
26) Tetrahydrofuran	17.49	72	149574	42.38 ppb	#	1
27) chloroform	17.52	83	3102387	47.26 ppb		96
28) 1,1,1-trichloroethane	17.83	97	2510001	50.37 ppb		88
29) Allyl chloride	13.63	76	2421015	54.91 ppb	#	99
32) 4-Methyl-2-pentanone (MIBK	21.03	43	1358950	40.29 ppb	#	78
33) 2-Chloroethyl Vinyl Ether	20.21	63	8981	0.72 ppb		100
34) carbon tetrachloride	18.04	117	2335533	52.14 ppb		94
35) 1,1-dichloropropene	18.07	75	2368273	53.69 ppb		87
36) benzene	18.43	78	5296273	48.24 ppb		97
37) 1,2-dichloroethane	18.55	62	2112646	45.98 ppb		93

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\492-8745.D
Acq On : 6 Oct 98 12:38 am
Sample : 84492-8745 msd
Misc :
Quant Time: Oct 6 1:12 1998

Vial: 16
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
38)	trichloroethene	19.42	95	1923595	45.92 ppb	#	72
39)	1,2-dichloropropane	19.86	63	1770079	49.52 ppb		79
40)	dibromomethane	20.05	93	1283461	46.26 ppb		98
41)	bromodichloromethane	20.23	83	2450585	46.16 ppb		97
42)	cis-1,3-dichloropropene	20.88	75	2332630	47.68 ppb		70
43)	toluene	21.33	92	3257215	47.77 ppb		99
44)	trans-1,3-dichloropropene	21.70	75	1846603	47.96 ppb		88
45)	1,1,2-trichloroethane	22.00	83	1184223	43.99 ppb	#	69
46)	1,2-Dibromoethane	22.83	107	1643105	44.04 ppb		100
47)	1,4-dichloro-2-butene	25.38	53	245231	58.95 ppb	#	9
49)	tetrachloroethene	22.12	166	2395560	36.30 ppb	#	84
50)	1,3-dichloropropane	22.26	76	2197080	43.84 ppb		98
51)	dibromochloromethane	22.58	129	1932533	43.32 ppb		98
52)	chlorobenzene	23.47	112	4246427	48.95 ppb		83
53)	1,1,1,2-tetrachloroethane	23.55	131	1785983	48.54 ppb		96
54)	ethylbenzene	23.50	91	6585522	47.53 ppb		99
5)	para & meta xylene	23.68	106	4914495	102.51 ppb		100
56)	ortho xylene	24.28	106	2528130	51.63 ppb		94
57)	styrene	24.31	104	3983842	50.29 ppb		99
58)	2-Hexanone (MBK)	22.23	43	928338	29.45 ppb	#	68
59)	bromoform	24.72	173	1251630	41.34 ppb		96
62)	Isopropyl benzene	24.77	105	6780549	48.10 ppb	#	77
63)	bromobenzene	25.41	156	2048266	47.76 ppb	#	1
64)	1,1,2,2-tetrachloroethane	25.29	83	1900314	39.84 ppb	#	1
65)	1,2,3-trichloropropane	25.43	75	2035275	46.63 ppb	#	1
66)	n-propylbenzene	25.38	91	8369477	48.43 ppb		83
67)	2-chlorotoluene	25.62	91	5626650	48.39 ppb		94
68)	4-chlorotoluene	25.78	91	4935618	44.79 ppb		94
69)	1,3,5-trimethylbenzene	25.61	105	5429023	48.36 ppb	#	1
70)	tert-butylbenzene	26.12	119	5478338	45.65 ppb		98
71)	1,2,4-trimethylbenzene	26.21	105	5683249	48.20 ppb		75
72)	sec-butylbenzene	26.44	105	7885115	51.10 ppb		97
73)	1,3-dichlorobenzene	26.77	146	3455772	46.65 ppb		92
74)	p-isopropyltoluene	26.61	119	6413555	46.91 ppb	#	30
75)	1,4-dichlorobenzene	26.90	146	3690698	46.65 ppb		98
76)	1,2-dichlorobenzene	27.50	146	3337134	46.15 ppb	#	100
77)	n-butylbenzene	27.23	91	6414129	50.03 ppb	#	100
78)	1,2-dibromo-3-chloropropan	28.68	75	368983	49.73 ppb	#	1
79)	1,2,4-trichlorobenzene	29.96	180	2630875	43.86 ppb	#	100
80)	hexachlorobutadiene	30.06	225	1535542	41.95 ppb		99
81)	naphthalene	30.43	128	4714204	40.93 ppb		100
82)	1,2,3-trichlorobenzene	30.84	180	2445605	44.31 ppb		100
3)	hexachloroethane	27.83	201	768425	54.66 ppb	#	100
84)	2-methylnapthalene	32.52	142	2763207	38.10 ppb		97

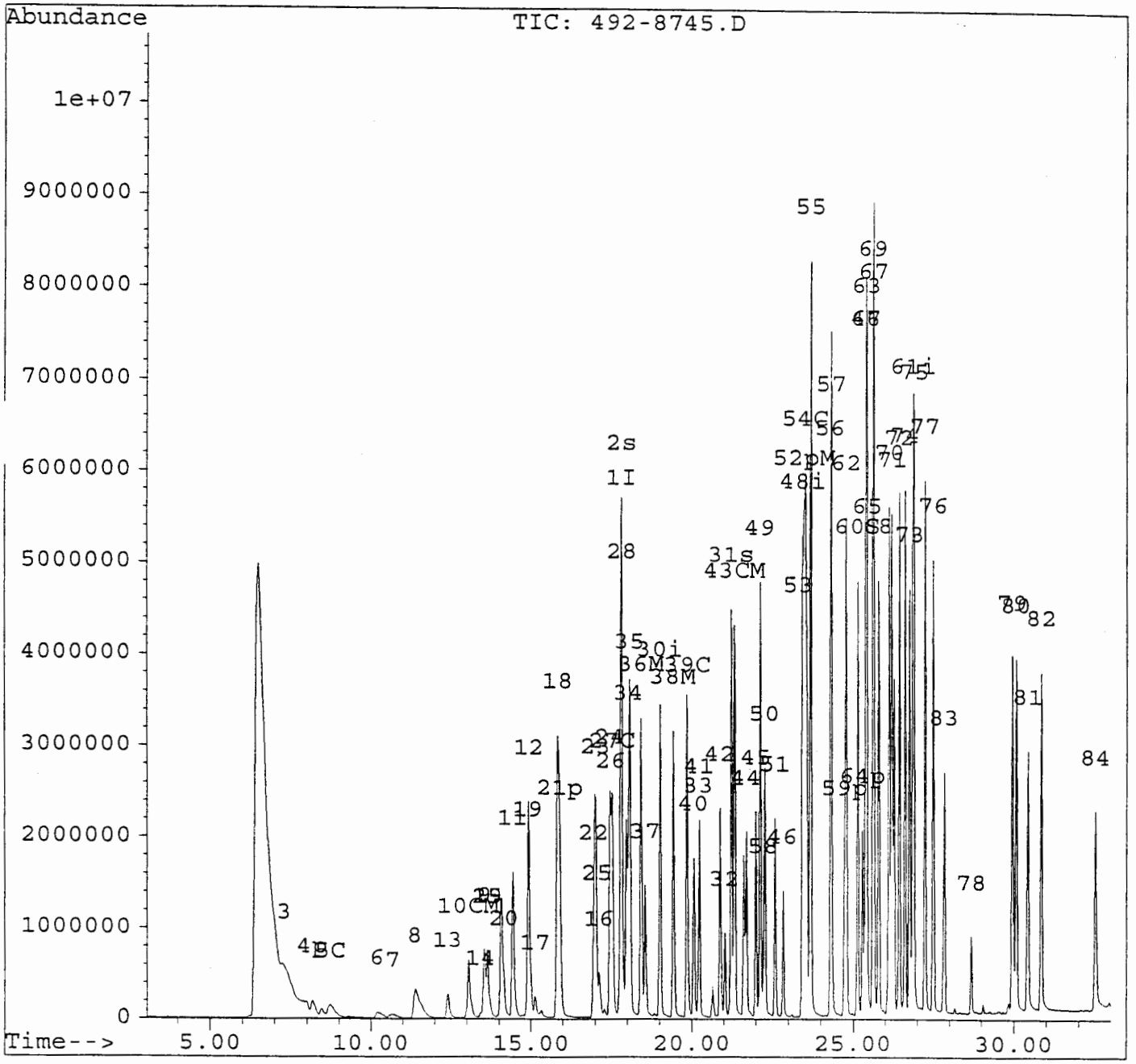
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\L05OCT98\492-8745.D
Acq On : 6 Oct 98 12:38 am
Sample : 84492-8745 msd
Misc :
Quant Time: Oct 6 1:12 1998

Vial: 16
Operator:
Inst : 5972-INST
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8260W105.M
Title : SW-8260 Purgable Organics
Last Update : Mon Oct 05 15:36:40 1998
Response via : Multiple Level Calibration



Current Water QC

Current Soil QC

RUN L
VOLATILE C...S
HP 5972 Inst. L

Batch: L29SEP98 Date: 9/29/98 IS/SURR: V2,276,7 Analyst: PG

pH	#	Client/Project	Computer Filename	Method	Amt. Used	Notes	
	0	BFB Tune	09BFB29A	BFB	1µl	V2,275,7	
	0	BFB Tune	09BFB29B	BFB	1µl	↓	
	1	100 ppb	IC1	8260W105	10µl	V2,282,3	
	2	50 ppb	IC2	↓	5µl	↓	
	3	25 ppb	IC3		2.5µl	↓	8260W105
	4	10 ppb	IC4		10µl	V2,282,3	
	5	5 ppb	IC5		5µl	↓	
	6	1 ppb	IC6	↓	1µl	↓	

X = Reported
RR = Reanalyze Sample

Current Water QC

Current Soil QC

R' OG
VOL GC/MS
HP 5972 Inst. H

Batch: H30SEP98 Date: 9/30/98 IS/SURR: V2,283,1 Analyst: PJG

pH	#	Client/Project	Computer Filename	Method	Amt. Used	Notes	
	0	BFB Tune	9BFB30A	BFD	1µl	V2,275,7	
	1	calcK 50 ppb	9CC30A	82605538	5µl	V2,281,7	
	2	LCS 50 ppb	9LCS30A	82605385	5µl	↓	
	3	Method Blank	9BLK30A	↓	/		
	13	84461-8668	461-8668	↓	10/5µl		X
	15	84461-8671	461-8671	↓	↓		X
	9	Blank	9BLK29B	↓	/		
	8	84473-8701	473-8701	↓	10/5µl		X
	0	BFB	9BFB30B	BFD	1µl		
	1	calcK 50 ppb	9CC30B	82605875	5µl	V2,281,7	
	0	BFB	9BFB30C	BFD	1µl	V2,275,7	
	1	1 ppb	IC1	82605538	1µl	V2,283,3	82605W88
	2	5 ppb	IC2	↓	5µl	↓	
	3	10 ppb	IC3	↓	10µl	↓	
	4	25 ppb	IC4	↓	2.5µl	V2,282,2	
	5	50 ppb	IC5	↓	5µl	↓	
	6	100 ppb	IC6	↓	10µl	↓	
	7	calcK 50 ppb	9CC30C	82605385	5µl	V2,281,7	
	8	LCS 50 ppb	9LCS30B	↓	5µl	↓	
	10	Method Blank	9BLK30B	↓	/		

X = Reported
RR = Reanalyze Sample

Current Water QC

Current Soil QC

RUN LOG
VOLATILE GC/MS
HP 5972 Inst. L

Batch: L010CT98 Date: 10/1/98 IS/SURR: V2,283,1 Analyst: PJG

pH	#	Client/Project	Computer Filename	Method	Amt. Used	Notes	
	0	BFB Tune	10BFB01A	BFB	1ml	V2,275,7	
	1	Cal CT 50ppb	10CC01A	8260W105	5ml	V2,281,7	
	2	LCS 50ppb	10LCS01A		5ml		
	3	Blank	10BLK01A				
	4	Method Blank	10BLK01A				
	5	Carbon Rush	Carbon		100ml	4g/10ml	X
1	6	84434-8570	434-8570		5ml		X
1	7	71	71				X
1	8	72	72				X
1	9	73	73				X
1	10	74	74				X
	11	Blank	10BLK01C			TCE Not clean	
1	12	84434-8575	434-8575				X
	13	76	76				X
1	14	84464-8677	77				X
1	15	78	78				X
1	16	79	79				X

X = Reported
RR = Reanalyze Sar

Current Water QC

Current Soil QC

RUN LOG
VOLAT C/MS
HP 59, A. H

Batch: H02OCT98 Date: 10/2/98 IS/SURR: V2,283,2 Analyst: PJG

pH	#	Client/Project	Computer Filename	Method	Amt. Used	Notes	
	0	BFB Tune	10BFB02A	BFB	1ml	V2,275,2	
	1	ccal 50ppb	10CC02A	8260W88	5ml	V2,287,7	
	2	LCS 50 ppb	10LCS02A		5ml	↓	
	3	Method Blank	10BLK02A		—		
	4	844468-8689	468-8689		500ml	10 x TCLP	X
	5	90	90				X
	6	91	91			SO	RR
	7	92	92				X
	8	93	93				X
	10	844480-8713	480-8713			~~500 x TCLP~~ PJG 10/2/98 10 x TCLP	X
	11	14	14			500x TCLP ~~RR ↓ Bit~~	X
1	12	844492-8739	492-8739				X
1	13	40	40				X
	9	844483-8724	483-8724		5ml	tclp blank	X
	15	844468-8693 ms	8693MS		500ml	10 x TCLP ms V2,281,7	
	16	MSD	8693MSD			MSD	
	14	844480-8713	8713SPK			SPK Past Tune	

X = Reported
RR = Reanalyze Sample

Current Water QC

Current Soil QC

R LOG
VOLATILE GC/MS
HP 5972 Inst. L

Batch: L02 Oct 98 Date: 10/2/98 IS/SURR: V2,283,2 Analyst: PJB

pH	#	Client/Project	Computer Filename	Method	Amt. Used	Notes	
	0	BFB Tune	10 BFB 02A	BFB	1 µl	V2,275,7	
	1	Cal ck 50ppb	10 CC02A	8260 4105	5 µl	V2,281,7	
	2	LCS 50ppb	10 LCS02A	↓	5 µl	↓	
	3	Blank	10 BLK02A				
	4	Method Blank	10 BLK02B				
	5	84464-8680	464-8680		5 ml		X
	6	↓ 81	↓ 81		↓		X
	7	82	82				X
	8	83	83				X
	9	84441-8611	441-8611		100 ml		X
	10	84462-8674	462-8674		10 ml	(4g/10ml) RR 100 ml	RR
	11	Blank	10 BLK02C			TCE 1.86 ppb	
	12	84475-8707	475-8707		500 ml	10 X TCLP SO Confirmed	X
	13	84467-8687	467-8687		2.5 ml	2000 X TCLP list RR 100X	
	14	84468-8688	468-8688		500 ml	10 X TCLP	X
	15	84475-8707	8707 MS		↓	↓ MS V2,281,7 SO Confirmed	
	16	↓	8707 MSD	↓	↓	↓ MSD ↓	

X = Reported
RR = Reanalyze Sample

Current Water QC

Current Soil QC

RUN LOG
VOLATILE GC/MS
HP 5972 Inst. L

Batch: L 05 Oct 98 Date: 10/5/98 IS/SURR: V2,283,2 Analyst: PJB

pH	#	Client/Project	Computer Filename	Method	Amt. Used	Notes	
	0	BFB Tune	10 BFB05A	BFB	1ml	V2,275,7	
	1	Calcr 50 ppb	10 CC05A	8260W105	5ml	V2,281,7	
	2	LCS 50 ppb	10 LCS05A		5ml	↓	
	3	Blank	10 BLK05A				
	4	Method Blank	10 BLK05B				
	5	84462-8674	462-8674		100ml	rr 125X 4g/100ml	X
	6	84467-8687	467-8687		50ml	rr 100X	X
	7	84468-8691	468-8691		500ml	rr 10X TCLP	X
	8	84492-8741	492-8741		5ml	rr	X
	9	84492-8742	42			rr	X
	10	43	43			rr	X
	11	84510-8797	510-8797		1ml	rr 5X	X
	12	84506-8786	506-8786		5ml	rr	X
	13	84492-8746	492-8746			rr	X
	14	47	47			rr	X
	15	43 MS	44			rr MS	
	16	45 MSD	45			rr MSD	

X = Reported
RR = Reanalyze Sample

METHOD 8270

QUALITY CONTROL SUMMARY

CT&E Environmental Services, Inc. - Anatech Division

WATER SEMIVOLATILE SURROGATE RECOVERY

Method: SW-846 Mtd. 8270C
Instrument: HP 5971 GC/MS - F

Date Reported: 10/12/98
Analyst: TMJ
Date Analyzed: 10/1/98
Analytical Batch: F01OCT98A
Date Extracted: 9/28/98
Extraction Batch: 8270-092W

	LABORATORY SAMPLE ID	S1 (2FP)	S2 (PHL)	S3 (NBZ)	S4 (FBP)	S5 (TBP)	S6 (TPH)	TOT OUT
1	84464-8677	24	20	35	43	69	87	
2	84464-8678	39	35	48	59	90	96	
3	84464-8680	45	38	45	54	94	99	
4	84464-8681	34	29	34	40	78	81	
5	84464-8682	18	16	31	35	59	79	
6	Method Blank	22	20	43	56	93	99	
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

	QC LIMITS*
S3 (NBZ) = Nitrobenzene-d5	13-101
S4 (FBP) = 2-Fluorobiphenyl	D-141
S6 (TPH) = Terphenyl-d14	7-160
S2 (PHL) = Phenol-d5	9-138
S1 (2FP) = 2-Fluorophenol	1-131
S5 (TBP) = 2,4,6-Tribromophenol	15-141

*Laboratory established, updated 7/15/96
+ Values outside of QC limits
D - Surrogate diluted out

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER SEMIVOLATILE SURROGATE RECOVERY

Method: SW-846 Mtd. 8270B
Instrument: HP 5970 GC/MS - E

Date Reported: 10/16/98
Analyst: TMJ
Date Analyzed: 10/1/98
Analytical Batch: E01OCT98
Date Extracted: 9/29/98
Extraction Batch: 8270-093W

	LABORATORY SAMPLE ID	S1 (2FP)	S2 (PHL)	S3 (NBZ)	S4 (FBP)	S5 (TBP)	S6 (TPH)	TOT OUT
1	84492-8739	39	32	75	70	81	77	
2	84492-8740	37	28	74	64	74	73	
3	84492-8741	34	28	75	65	85	76	
4	84492-8742	25	20	74	64	75	78	
5	84492-8743	37	28	66	60	78	67	
6	84492-8746	43	33	77	69	88	80	
7	Method Blank	34	25	61	60	76	78	
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								

	QC LIMITS*
S3 (NBZ) = Nitrobenzene-d5	13-101
S4 (FBP) = 2-Fluorobiphenyl	D-141
S6 (TPH) = Terphenyl-d14	7-160
S2 (PHL) = Phenol-d5	9-138
S1 (2FP) = 2-Fluorophenol	1-131
S5 (TBP) = 2,4,6-Tribromophenol	15-141

*Laboratory established, updated 7/15/96
+ Values outside of QC limits
D - Surrogate diluted out

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER SEMIVOLATILE LABORATORY CONTROL SPIKE / LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Method: SW-846 Mtd. 8270C
Instrument: HP 5971 GC/MS - F
LCS File Name: LCS092W
LCSD File Name: LCSD092W

Spiked Sample ID: DI Water

Date Reported: 10/12/98
Analyst: TMJ
Date Analyzed: 10/01/98
Analytical Batch: F01OCT98A
Date Extracted: 9/28/98
Extraction Batch: 8270-092W

COMPOUND	SPIKE LEVEL (µg/L)	SAMPLE CONCENTRATION (µg/L)	LCS CONCENTRATION (µg/L)	LCS % REC	#	QC LIMITS* REC.
Acenaphthene	100	0	70	70%		32-133
4-Chloro-3-methylphenol	200	0	139	70%		26-147
2-Chlorophenol	200	0	124	62%		19-134
1,4-Dichlorobenzene	100	0	59	59%		20-124
2,4-Dinitrotoluene	100	0	87	87%		19-107
4-Nitrophenol	200	0	53	27%		25-132
n-Nitroso-di-n-propylamine	100	0	78	78%		37-125
Pentachlorophenol	200	0	189	95%		28-136
Phenol	200	0	61	31%		10-112
Pyrene	100	0	86	86%		53-136
1,2,4-Trichlorobenzene	100	0	65	65%		36-142

COMPOUND	SPIKE LEVEL (µg/L)	LCSD CONCENTRATION (µg/L)	LCSD % REC	#	% RPD	QC LIMITS* REC.
Acenaphthene	100	70	70%		0%	32-133
4-Chloro-3-methylphenol	200	140	70%		1%	26-147
2-Chlorophenol	200	110	55%		12%	19-134
1,4-Dichlorobenzene	100	45	45%		27%	20-124
2,4-Dinitrotoluene	100	89	89%		2%	19-107
4-Nitrophenol	200	51	26%		4%	25-132
n-Nitroso-di-n-propylamine	100	75	75%		4%	37-125
Pentachlorophenol	200	186	93%		2%	28-136
Phenol	200	58	29%		5%	10-112
Pyrene	100	86	86%		0%	53-136
1,2,4-Trichlorobenzene	100	57	57%		13%	36-142

*Laboratory established, updated 2/13/97

Values outside of QC limits

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER SEMIVOLATILE LABORATORY CONTROL SPIKE / LABORATORY CONTROL SPIKE DUPLICATE RECOVERY

Method: SW-846 Mtd. 8270C
Instrument: HP 5970 GC/MS - E
LCS File Name: LCS093W
LCSD File Name: LCSD093W

Spiked Sample ID: DI Water

Date Reported: 10/16/98
Analyst: TMJ
Date Analyzed: 10/01/98
Analytical Batch: E01OCT98A
Date Extracted: 9/29/98
Extraction Batch: 8270-093W

COMPOUND	SPIKE LEVEL (µg/L)	SAMPLE CONCENTRATION (µg/L)	LCS CONCENTRATION (µg/L)	LCS % REC	#	QC LIMITS* REC.
Acenaphthene	100	0	78	78%		32-133
4-Chloro-3-methylphenol	200	0	153	77%		26-147
2-Chlorophenol	200	0	127	64%		19-134
1,4-Dichlorobenzene	100	0	62	62%		20-124
2,4-Dinitrotoluene	100	0	91	91%		19-107
4-Nitrophenol	200	0	52	26%		25-132
n-Nitroso-di-n-propylamine	100	0	62	62%		37-125
Pentachlorophenol	200	0	131	66%		28-136
Phenol	200	0	55	28%		10-112
Pyrene	100	0	88	88%		53-136
1,2,4-Trichlorobenzene	100	0	68	68%		36-142

COMPOUND	SPIKE LEVEL (µg/L)	LCSD CONCENTRATION (µg/L)	LCSD % REC	#	% RPD	QC LIMITS* REC.
Acenaphthene	100	79	79%		1%	32-133
4-Chloro-3-methylphenol	200	164	82%		7%	26-147
2-Chlorophenol	200	157	79%		21%	19-134
1,4-Dichlorobenzene	100	73	73%		16%	20-124
2,4-Dinitrotoluene	100	96	96%		5%	19-107
4-Nitrophenol	200	73	37%		34%	25-132
n-Nitroso-di-n-propylamine	100	63	63%		2%	37-125
Pentachlorophenol	200	172	86%		27%	28-136
Phenol	200	73	37%		28%	10-112
Pyrene	100	91	91%		3%	53-136
1,2,4-Trichlorobenzene	100	73	73%		7%	36-142

*Laboratory established, updated 2/13/97

Values outside of QC limits

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER SEMIVOLATILE MATRIX SPIKE / MATRIX SPIKE DUPLICATE RECOVERY

Method: SW-846 Mtd. 8270B
Instrument: HP 5971 GC/MS - F
MS File Name: MS-8744
MSD File Name: MS-8745
Spiked Sample ID: 84492-8743

Date Reported: 10/16/98
Analyst: TMJ
Date Analyzed: 10/01/98
Analytical Batch: E01OCT98A
Date Extracted: 9/29/98
Extraction Batch: 8270-093W

COMPOUND	SPIKE LEVEL (µg/L)	SAMPLE CONCENTRATION (µg/L)	MS CONCENTRATION (µg/L)	MS % REC	#	QC LIMITS* REC.
Acenaphthene	100	0	73	73%		32-133
4-Chloro-3-methylphenol	200	0	151	76%		26-147
2-Chlorophenol	200	0	118	59%		19-134
1,4-Dichlorobenzene	100	0	60	60%		20-124
2,4-Dinitrotoluene	100	0	89	89%		19-107
4-Nitrophenol	200	0	46	23%	#	25-132
n-Nitroso-di-n-propylamine	100	0	68	68%		37-125
Pentachlorophenol	200	0	153	77%		28-136
Phenol	200	0	52	26%		10-112
Pyrene	100	0	87	87%		53-136
1,2,4-Trichlorobenzene	100	0	67	67%		36-142

COMPOUND	SPIKE LEVEL (µg/L)	MSD CONCENTRATION (µg/L)	MSD % REC	#	% RPD	QC LIMITS* REC.
Acenaphthene	100	70	70%		4%	32-133
4-Chloro-3-methylphenol	200	142	71%		6%	26-147
2-Chlorophenol	200	105	53%		12%	19-134
1,4-Dichlorobenzene	100	58	58%		3%	20-124
2,4-Dinitrotoluene	100	93	93%		4%	19-107
4-Nitrophenol	200	30	15%	#	42%	25-132
n-Nitroso-di-n-propylamine	100	56	56%		19%	37-125
Pentachlorophenol	200	116	58%		28%	28-136
Phenol	200	47	24%		10%	10-112
Pyrene	100	89	89%		2%	53-136
1,2,4-Trichlorobenzene	100	64	64%		5%	36-142

*Laboratory established, updated 2/13/97

Values outside of QC limits

Comments:
#Compound is acceptable in the LCS and LCSD.

CT&E Environmental Services, Inc. - Anatech Division

WATER SEMIVOLATILE METHOD BLANK SUMMARY

Method: SW-846 Mtd. 8270C
Instrument: HP 5971 GC/MS - F

MB File Name: LCB092W

Date Reported: 10/12/98
Analyst: TMJ
Date Analyzed: 10/1/98
Analytical Batch: F01OCT98A
Date Extracted: 09/28/98
Extraction Batch: 8270-092W

COMPOUND	BLANK CONC. (µg/L)	DL (µg/L)
Pyridine	ND	5
n-Nitrosodimethylamine	ND	5
Aniline	ND	20
Benzyl alcohol	ND	50
Benzoic acid	ND	50
Phenol	ND	5
bis(2-Chloroethyl)ether	ND	5
2-Chlorophenol	ND	5
1,3-Dichlorobenzene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
2-Methylphenol	ND	5
bis(2-Chloroisopropyl)ether	ND	5
3&4-Methylphenol	ND	10
n-Nitroso-di-n-propylamine	ND	5
Hexachloroethane	ND	5
Nitrobenzene	ND	5
Isophorone	ND	5
2-Nitrophenol	ND	5
2,4-Dimethylphenol	ND	5
bis(2-Chloroethoxy)methane	ND	5
2,4-Dichlorophenol	ND	5
1,2,4-Trichlorobenzene	ND	5
Naphthalene	ND	5
4-Chloroanailine	ND	20
Hexachlorobutadiene	ND	5
4-Chloro-3-methylphenol	ND	5
2-Methylnaphthalene	ND	5
1,2-Diphenylhydrazine	ND	5
Hexachlorocyclopentadiene	ND	5
2,4,6-Trichlorophenol	ND	5
2,4,5-Trichlorophenol	ND	5
2-Chloronaphthalene	ND	5
2-Nitroaniline	ND	20
Dimethylphthalate	ND	5

COMPOUND	BLANK CONC. (µg/L)	DL (µg/L)
Acenaphthylene	ND	5
2,6-Dinitrotoluene	ND	5
3-Nitroaniline	ND	20
Acenaphthene	ND	5
2,4-Dinitrophenol	ND	20
4-Nitrophenol	ND	20
Dibenzofuran	ND	5
2,4-Dinitrotoluene	ND	5
Diethylphthalate	ND	5
Fluorene	ND	5
4-Chlorophenyl-phenylether	ND	5
4-Nitroaniline	ND	20
4,6-Dinitro-2-methylphenol	ND	20
n-Nitrosodiphenylamine	ND	5
4-Bromophenyl-phenylether	ND	5
Hexachlorobenzene	ND	5
Pentachlorophenol	ND	5
Phenanthrene	ND	5
Anthracene	ND	5
Carbazole	ND	5
Di-n-butylphthalate	ND	5
Fluoranthene	ND	5
Pyrene	ND	5
Butylbenzylphthalate	ND	5
Benzo[a]anthracene	ND	5
3,3'-Dichlorobenzidine	ND	20
Chrysene	ND	5
bis(2-Ethylhexyl)phthalate	ND	5
Di-n-octylphthalate	ND	5
Benzo[b]fluoranthene	ND	5
Benzo[k]fluoranthene	ND	5
Benzo[a]pyrene	ND	5
Indeno[1,2,3-cd]pyrene	ND	5
Dibenzo[a,h]anthracene	ND	5
Benzo[g,h,i]perylene	ND	5

Comments:

CT&E Environmental Services, Inc. - Anatech Division

WATER SEMIVOLATILE METHOD BLANK SUMMARY

Method: SW-846 Mtd. 8270C
Instrument: HP 5970 GC/MS - E

MB File Name: LCB093W

Date Reported: 10/16/98
Analyst: TMJ
Date Analyzed: 10/1/98
Analytical Batch: E01OCT98A
Date Extracted: 09/29/98
Extraction Batch: 8270-093W

COMPOUND	BLANK CONC. (µg/L)	DL (µg/L)
Pyridine	ND	5
n-Nitrosodimethylamine	ND	5
Aniline	ND	20
Benzyl alcohol	ND	50
Benzoic acid	ND	50
Phenol	ND	5
bis(2-Chloroethyl)ether	ND	5
2-Chlorophenol	ND	5
1,3-Dichlorobenzene	ND	5
1,4-Dichlorobenzene	ND	5
1,2-Dichlorobenzene	ND	5
2-Methylphenol	ND	5
bis(2-Chloroisopropyl)ether	ND	5
3&4-Methylphenol	ND	10
n-Nitroso-di-n-propylamine	ND	5
Hexachloroethane	ND	5
Nitrobenzene	ND	5
Isophorone	ND	5
2-Nitrophenol	ND	5
2,4-Dimethylphenol	ND	5
bis(2-Chloroethoxy)methane	ND	5
2,4-Dichlorophenol	ND	5
1,2,4-Trichlorobenzene	ND	5
Naphthalene	ND	5
4-Chloroanailine	ND	20
Hexachlorobutadiene	ND	5
4-Chloro-3-methylphenol	ND	5
2-Methylnaphthalene	ND	5
1,2-Diphenylhydrazine	ND	5
Hexachlorocyclopentadiene	ND	5
2,4,6-Trichlorophenol	ND	5
2,4,5-Trichlorophenol	ND	5
2-Chloronaphthalene	ND	5
2-Nitroaniline	ND	20
Dimethylphthalate	ND	5

COMPOUND	BLANK CONC. (µg/L)	DL (µg/L)
Acenaphthylene	ND	5
2,6-Dinitrotoluene	ND	5
3-Nitroaniline	ND	20
Acenaphthene	ND	5
2,4-Dinitrophenol	ND	20
4-Nitrophenol	ND	20
Dibenzofuran	ND	5
2,4-Dinitrotoluene	ND	5
Diethylphthalate	ND	5
Fluorene	ND	5
4-Chlorophenyl-phenylether	ND	5
4-Nitroaniline	ND	20
4,6-Dinitro-2-methylphenol	ND	20
n-Nitrosodiphenylamine	ND	5
4-Bromophenyl-phenylether	ND	5
Hexachlorobenzene	ND	5
Pentachlorophenol	ND	5
Phenanthrene	ND	5
Anthracene	ND	5
Carbazole	ND	5
Di-n-butylphthalate	ND	5
Fluoranthene	ND	5
Pyrene	ND	5
Butylbenzylphthalate	ND	5
Benzo[a]anthracene	ND	5
3,3'-Dichlorobenzidine	ND	20
Chrysene	ND	5
bis(2-Ethylhexyl)phthalate	ND	5
Di-n-octylphthalate	ND	5
Benzo[b]fluoranthene	ND	5
Benzo[k]fluoranthene	ND	5
Benzo[a]pyrene	ND	5
Indeno[1,2,3-cd]pyrene	ND	5
Dibenzo[a,h]anthracene	ND	5
Benzo[g,h,i]perylene	ND	5

Comments:

CT&E Environmental Services, Inc. - Anatech Division

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DFTPP

Method: SW-846 Mtd. 8270C
Instrument: HP 5971 GC/MS - F

Tune File Name: 08TUN07A

Date Reported: 10/15/98
Analyst: TMJ
Date Analyzed: 08/07/98
Analytical Batch: F07AUG98A

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0-60.0% of mass 198	43.9
68	Less than 2%of mass 69	0.0
70	Less than 2% of mass 69	0.4
127	40.0-60.0% of mass 198	53.0
197	Less than 1% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0-9.0 of mass 198	6.6
275	10.0-30.0 of mass 198	18.9
365	Greater than 1.00% of mass 198	2.1
441	Present, but less than mass 443	75.0
442	Greater than 40.0% of mass 198	49.7
443	17.0-23.0 of mass 442	19.0

Note: DFTPP is the tuning compound, decafluorotriphenylphosphine.

CT&E Environmental Services, Inc. - Anatech Division

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DFTPP

Method: SW-846 Mtd. 8270C
Instrument: HP 5970 GC/MS - E

Tune File Name: 09TUN30A

Date Reported: 10/20/98
Analyst: TMJ
Date Analyzed: 09/30/98
Analytical Batch: E30SEP98A

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0-60.0% of mass 198	39.3
68	Less than 2%of mass 69	0.0
70	Less than 2% of mass 69	0.5
127	40.0-60.0% of mass 198	46.0
197	Less than 1% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0-9.0 of mass 198	6.1
275	10.0-30.0 of mass 198	19.2
365	Greater than 1.00% of mass 198	1.8
441	Present, but less than mass 443	65.3
442	Greater than 40.0% of mass 198	53.6
443	17.0-23.0 of mass 442	19.9

Note: DFTPP is the tuning compound, decafluorotriphenylphosphine.

CT&E Environmental Services, Inc. - Anatech Division

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DFTPP

Method: SW-846 Mtd. 8270C
Instrument: HP 5971 GC/MS - F

Tune File Name: 10TUN01A

Date Reported: 10/12/98
Analyst: TMJ
Date Analyzed: 10/01/98
Analytical Batch: F01OCT98A

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0-60.0% of mass 198	38.1
68	Less than 2%of mass 69	0.0
70	Less than 2% of mass 69	0.6
127	40.0-60.0% of mass 198	50.7
197	Less than 1% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0-9.0 of mass 198	6.8
275	10.0-30.0 of mass 198	19.2
365	Greater than 1.00% of mass 198	1.9
441	Present, but less than mass 443	69.3
442	Greater than 40.0% of mass 198	48.6
443	17.0-23.0 of mass 442	19.8

Note: DFTPP is the tuning compound, decafluorotriphenylphosphine.

CT&E Environmental Services, Inc. - Anatech Division

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DFTPP

Method: SW-846 Mtd. 8270C
Instrument: HP 5970 GC/MS - E

Tune File Name: 10TUN01A

Date Reported: 10/16/98
Analyst: TMJ
Date Analyzed: 10/01/98
Analytical Batch: E01OCT98A

m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0-60.0% of mass 198	46.1
68	Less than 2%of mass 69	0.0
70	Less than 2% of mass 69	0.4
127	40.0-60.0% of mass 198	51.1
197	Less than 1% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0-9.0 of mass 198	6.6
275	10.0-30.0 of mass 198	18.8
365	Greater than 1.00% of mass 198	1.9
441	Present, but less than mass 443	67.4
442	Greater than 40.0% of mass 198	46.2
443	17.0-23.0 of mass 442	19.7

Note: DFTPP is the tuning compound, decafluorotriphenylphosphine.

CT&E Environmental Services, Inc. - Anatech Division

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Method: SW-846 Mth. 8270C
Instrument: HP 5971 GC/MS -F

CCC File Name: 10CC01A.D

Date Reported: 10/02/98
Analyst: TMJ
Date Analyzed: 10/01/98
Analytical Batch F01OCT98A

COMPOUND	AvgRRF	CCRRF	%D	SPCC MIN RRF	CCC MAX %D
Pyridine	1.209	1.109	8.3%		
N-Nitrosodimethylamine	0.930	0.818	12.1%		
Aniline	1.772	1.661	6.3%		
Benzyl alcohol	1.052	1.100	-4.6%		
Benzoic acid	0.891	0.760	14.7%		
Phenol	1.988	1.943	2.2%		20
bis(2-Chloroethyl)ether	1.154	1.055	8.6%		
2-Chlorophenol	1.413	1.412	0.0%		
1,3-Dichlorobenzene	1.344	1.358	-1.0%		
1,4-Dichlorobenzene	1.500	1.565	-4.4%		20
1,2-Dichlorobenzene	1.323	1.322	0.1%		
2-Methylphenol	1.439	1.548	-7.6%		
bis(2-Chloroisopropyl) ether	2.076	1.920	7.5%		
3&4-Methylphenol	1.402	1.545	-10.2%		
n-Nitroso-di-n-propylamine	1.178	1.219	-3.5%	0.05	
Hexachloroethane	0.654	0.642	1.9%		
Nitrobenzene	0.467	0.425	9.1%		
Isophorone	0.939	0.922	1.8%		
2-Nitrophenol	0.244	0.274	-12.1%		20
2,4-Dimethylphenol	0.457	0.462	-1.2%		
bis(2-Chloroethoxy)methane	0.519	0.481	7.2%		
2,4-Dichlorophenol	0.309	0.338	-9.5%		20
1,2,4-Trichlorobenzene	0.299	0.300	-0.5%		
Naphthalene	0.993	1.019	-2.7%		
4-Chloroaniline	0.363	0.354	2.5%		
Hexachlorobutadiene	0.157	0.185	-17.3%		20
4-Chloro-3-methylphenol	0.393	0.387	1.6%		20
2-Methylnaphthalene	0.664	0.740	-11.4%		
1,2-Diphenylhydrazine	1.889	1.829	3.1%		
Hexachlorocyclopentadiene	0.192	0.093	51.3%	0.05	
2,4,6-Trichlorophenol	0.262	0.279	-6.8%		20
2,4,5-Trichlorophenol	0.274	0.275	-0.5%		
2-Chloronaphthalene	1.022	1.003	1.9%		
2-Nitroaniline	0.437	0.418	4.5%		
Dimethylphthalate	1.281	1.383	-7.9%		
Acenaphthylene	1.514	1.442	4.8%		
2,6-Dinitrotoluene	0.322	0.341	-5.9%		

CT&E Environmental Services, Inc. - Anatech Division

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Method: SW-846 Mth. 8270C
Instrument: HP 5971 GC/MS -F

CCC File Name: 10CC01A.D

Date Reported: 10/02/98
Analyst: TMJ
Date Analyzed: 10/01/98
Analytical Batch F01OCT98A

COMPOUND	AvgRRF	CCRRF	%D	SPCC MIN RRF	CCC MAX %D
3-Nitroaniline	0.197	0.230	-16.4%		
Acenaphthene	0.960	0.926	3.5%		20
2,4-Dinitrophenol	0.160	0.159	0.7%	0.05	
4-Nitrophenol	0.200	0.166	17.1%	0.05	
Dibenzofuran	1.490	1.531	-2.8%		
2,4-Dinitrotoluene	0.438	0.444	-1.3%		
Diethylphthalate	1.245	1.311	-5.3%		
Fluorene	1.223	1.286	-5.1%		
4-Chlorophenyl-phenylether	0.421	0.472	-12.1%		
4-Nitroaniline	0.213	0.219	-3.0%		
4,6-Dinitro-2-methylphenol	0.122	0.150	-23.1%		
n-Nitrosodiphenylamine	0.506	0.584	-15.4%		20
4-Bromophenyl-phenylether	0.164	0.187	-14.2%		
Hexachlorobenzene	0.156	0.178	-14.2%		
Pentachlorophenol	0.099	0.102	-2.7%		20
Phenanthrene	1.050	1.065	-1.4%		
Anthracene	1.021	1.006	1.4%		
Carbazole	0.558	0.538	3.7%		
Di-n-butylphthalate	1.534	1.448	5.6%		
Fluoranthene	0.954	0.924	3.1%		20
Pyrene	1.350	1.422	-5.3%		
Butylbenzylphthalate	0.997	1.134	-13.7%		
Benzo[a]anthracene	1.238	1.262	-1.9%		
3,3'-Dichlorobenzidine	0.272	0.282	-3.7%		
Chrysene	1.089	1.095	-0.6%		
bis(2-Ethylhexyl)phthalate	1.272	1.371	-7.8%		
Di-n-octylphthalate	3.136	3.466	-10.5%		20
Benzo[b]fluoranthene	1.570	1.450	7.7%		
Benzo[k]fluoranthene	1.199	1.239	-3.4%		
Benzo[a]pyrene	1.265	1.305	-3.1%		20
Indeno[1,2,3-cd]pyrene	1.155	1.236	-7.0%		
Dibenz[a,h]anthracene	0.898	1.038	-15.6%		
Benzo[g,h,i]perylene	0.964	1.054	-9.3%		
1-Methylnaphthalene	0.630	0.716	-13.8%		

Comments:

CT&E Environmental Services, Inc. - Anatech Division

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Method: SW-846 Mth. 8270C
Instrument: HP 5970 GC/MS - E

CCC File Name: 10CC01A.D

Date Reported: 10/02/98
Analyst: TMJ
Date Analyzed: 10/01/98
Analytical Batch E01OCT98A

COMPOUND	AvgRRF	CCRRF	%D	SPCC MIN RRF	CCC MAX %D
Pyridine	1.051	1.022	2.7%		
N-Nitrosodimethylamine	0.807	0.865	-7.2%		
Aniline	1.966	2.215	-12.6%		
Benzyl Alcohol	0.958	0.989	-3.3%		
Benzoic Acid	0.865	0.916	-5.8%		
Phenol	1.769	1.686	4.7%		20
bis(2-Chloroethyl)ether	1.326	1.507	-13.7%		
2-Chlorophenol	1.459	1.528	-4.7%		
1,3-Dichlorobenzene	1.415	1.538	-8.7%		
1,4-Dichlorobenzene	1.506	1.556	-3.3%		20
1,2-Dichlorobenzene	1.375	1.360	1.1%		
2-Methylphenol	1.257	1.346	-7.1%		
Bis(2-chloroisopropyl) ether	1.442	1.658	-15.0%		
3&4-Methylphenol	1.251	1.341	-7.2%		
n-Nitroso-di-n-propylamine	0.931	1.006	-8.0%	0.05	
Hexachloroethane	0.601	0.656	-9.2%		
Nitrobenzene	0.378	0.389	-2.9%		
Isophorone	0.787	0.879	-11.8%		
2-Nitrophenol	0.236	0.268	-13.8%		20
2,4-Dimethylphenol	0.395	0.421	-6.8%		
bis(2-Chloroethoxy)methane	0.467	0.464	0.5%		
2,4-Dichlorophenol	0.296	0.309	-4.4%		20
1,2,4-Trichlorobenzene	0.286	0.298	-4.4%		
Naphthalene	0.974	1.043	-7.1%		
4-Chloroaniline	0.447	0.463	-3.5%		
Hexachlorobutadiene	0.143	0.163	-14.4%		20
4-Chloro-3-methylphenol	0.343	0.381	-10.9%		20
2-Methylnaphthalene	0.629	0.649	-3.2%		
1,2-Diphenylhydrazine	1.627	1.734	-6.6%		
Hexachlorocyclopentadiene	0.291	0.264	9.1%	0.05	
2,4,6-Trichlorophenol	0.377	0.398	-5.6%		20
2,4,5-Trichlorophenol	0.396	0.424	-7.0%		
2-Chloronaphthalene	1.087	1.093	-0.6%		
2-Nitroaniline	0.401	0.455	-13.4%		
Dimethylphthalate	1.351	1.440	-6.6%		
Acenaphthylene	1.752	1.637	6.6%		
2,6-Dinitrotoluene	0.339	0.389	-14.9%		

CT&E Environmental Services, Inc. - Anatech Division

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Method: SW-846 Mth. 8270B
Instrument: HP 5970 GC/MS - E

CCC File Name: 10CC01A.D

Date Reported: 10/02/98
Analyst: TMJ
Date Analyzed: 10/01/98
Analytical Batch E01OCT98A

COMPOUND	AvgRRF	CCRRF	%D	SPCC MIN RRF	CCC MAX %D
3-Nitroaniline	0.354	0.392	-10.9%		
Acenaphthene	1.102	1.098	0.4%		20
2,4-Dinitrophenol	0.221	0.305	-37.9%	0.05	
4-Nitrophenol	0.206	0.236	-14.6%	0.05	
Dibenzofuran	1.529	1.642	-7.3%		
2,4-Dinitrotoluene	0.488	0.517	-5.9%		
Diethylphthalate	1.458	1.533	-5.2%		
Fluorene	1.255	1.378	-9.8%		
4-Chlorophenyl-phenylether	0.557	0.568	-1.9%		
4-Nitroaniline	0.354	0.432	-22.0%		
4,6-Dinitro-2-methylphenol	0.147	0.194	-31.9%		
n-Nitrosodiphenylamine	0.445	0.458	-3.0%		20
4-Bromophenyl-phenylether	0.183	0.202	-10.4%		
Hexachlorobenzene	0.191	0.204	-7.1%		
Pentachlorophenol	0.151	0.160	-6.0%		20
Phenanthrene	1.014	1.050	-3.6%		
Anthracene	0.986	1.065	-8.0%		
Carbazole	0.896	0.921	-2.8%		
Di-n-butylphthalate	1.473	1.624	-10.2%		
Fluoranthene	1.043	1.105	-5.9%		20
Pyrene	1.412	1.471	-4.2%		
Butylbenzylphthalate	0.975	1.059	-8.6%		
Benzo[a]anthracene	1.288	1.385	-7.6%		
3,3'-Dichlorobenzidine	0.370	0.394	-6.3%		
Chrysene	1.088	1.234	-13.5%		
bis(2-Ethylhexyl)phthalate	1.336	1.426	-6.8%		
Di-n-octylphthalate	2.219	2.356	-6.2%		20
Benzo[b]fluoranthene	1.404	1.488	-5.9%		
Benzo[k]fluoranthene	1.096	1.039	5.2%		
Benzo[a]pyrene	1.175	1.285	-9.3%		20
Indeno[1,2,3-cd]pyrene	1.218	1.255	-3.0%		
Dibenz[a,h]anthracene	1.014	1.119	-10.3%		
Benzo[g,h,i]perylene	1.118	1.145	-2.4%		
1-Methylnaphthalene	0.602	0.704	-17.0%		

Comments:

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): 10CC01A
Date Analyzed: 10/1/98
Instrument ID: HP 5971 F

SAMPLE ID	IS1(DCB) AREA #	RT#	IS2(NPT)AREA#	RT#	IS3(ANT)AREA#	RT#	IS4(PHN)AREA#	RT#	IS5(CRY)AREA#	RT#	IS6(PRY)AREA#	RT#
CONT. CAL	1115584	8.27	3924803	11.67	2478286	16.80	3482418	21.12	2136788	29.00	1484835	32.69
84464-8677	1067429	8.24	3935256	11.65	2457754	16.78	3430224	21.11	2081236	28.97	1392859	32.68
84464-8678	1027617	8.25	3960087	11.65	2485327	16.78	3497322	21.10	2140098	28.97	1448141	32.68
84464-8680	1021593	8.25	3864015	11.65	2421339	16.79	3421339	21.10	2127254	28.97	1419052	32.68
84464-8681	1049636	8.25	3959411	11.65	2436043	16.79	3379971	21.10	2122072	28.97	1419632	32.68
84464-8682	1125369	8.25	4041582	11.65	2503956	16.78	3570169	21.11	2269124	28.97	1485702	32.68

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenapththene-d10

IS4 (PHN) Phenanthrene-d10
IS5 (CRY) Chrysene = d12
IS6 (PRY) = Perylene-d12

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab File ID (Standard): 10CC01A
Date Analyzed: 10/1/98
Instrument ID: HP 5970 E

SAMPLE ID	IS1(DCB) AREA #	RT#	IS2(NPT)AREA#	RT#	IS3(ANT)AREA#	RT#	IS4(PHN)AREA#	RT#	IS5(CRY)AREA#	RT#	IS6(PRY)AREA#	RT#
CONT. CAL	2149626	9.36	8042358	13.01	4472167	18.46	8044533	23.06	6206594	31.41	6560121	36.58
84492-8739	1632374	9.33	6626827	12.98	3852419	18.44	6377820	23.03	5549854	31.36	4853489	36.51
84492-8740	2059840	9.35	8285793	12.99	4873913	18.44	8035070	23.03	6967068	31.37	6443311	36.53
84492-8741	1911081	9.33	7528462	12.99	4308221	18.44	7370928	23.04	6376750	31.37	5868927	36.51
84492-8742	1973831	9.34	7686292	12.99	4441369	18.44	7614579	23.03	6791124	31.37	6123227	36.53
84492-8743	2068470	9.35	7962105	12.99	4609126	18.45	8020740	23.04	7057512	31.38	6289641	36.53
84492-8746	1735757	9.35	6671191	12.99	3798994	18.45	6582778	23.04	6001072	31.37	5321196	36.52

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenapththene-d10

IS4 (PHN) Phenanthrene-d10
IS5 (CRY) Chrysene = d12
IS6 (PRY) = Perylene-d12

RAW DATA

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\464-8677.D Vial: 7
Acq On : 1 Oct 98 12:04 pm Operator: TMJ
Sample : NMED 84464-8677 8270#092W Inst : HP 5971 -
Misc : 9/28/98 1000/1 IS:S2,16,6 Multiplr: 1.00
Quant Time: Oct 1 12:41 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.24	152	1067429	40.00 ppb	-0.05
20) Naphthalene-d8	11.65	136	3935256	40.00 ppb	-0.05
35) Acenaphthene-d10	16.78	164	2457754	40.00 ppb	-0.05
55) Phenanthrene-d10	21.11	188	3430224	40.00 ppb	-0.04
68) Chyrsene-d12	28.97	240	2081236	40.00 ppb	-0.06
77) Perylene-d12	32.68	264	1392859	40.00 ppb	-0.04

System Monitoring Compounds					%Recovery
4) 2-Fluorophenol (s.s.)	5.63	112	2020206	47.10 ppb	23.55%
6) Phenol-d5 (s.s)	7.79	99	1863368	39.83 ppb	19.92%
21) Nitrobenzene-d5 (s.s)	9.79	82	1647768	35.38 ppb	35.38%
39) 2-Fluorobiphenyl (s.s)	14.89	172	3041794	43.26 ppb	43.26%
59) 2,4,6-Tribromophenol (s.s)	19.20	330	849971	137.11 ppb	68.55%
71) Terphenyl-d14 (s.s)	26.00	244	4001454	87.20 ppb	87.20%

Target Compounds					Qvalue
6) bis(2-Ethylhexyl)phthalate	29.44	149	49541	0.75 ppb	97

8270 App IX
ND
10-2-98

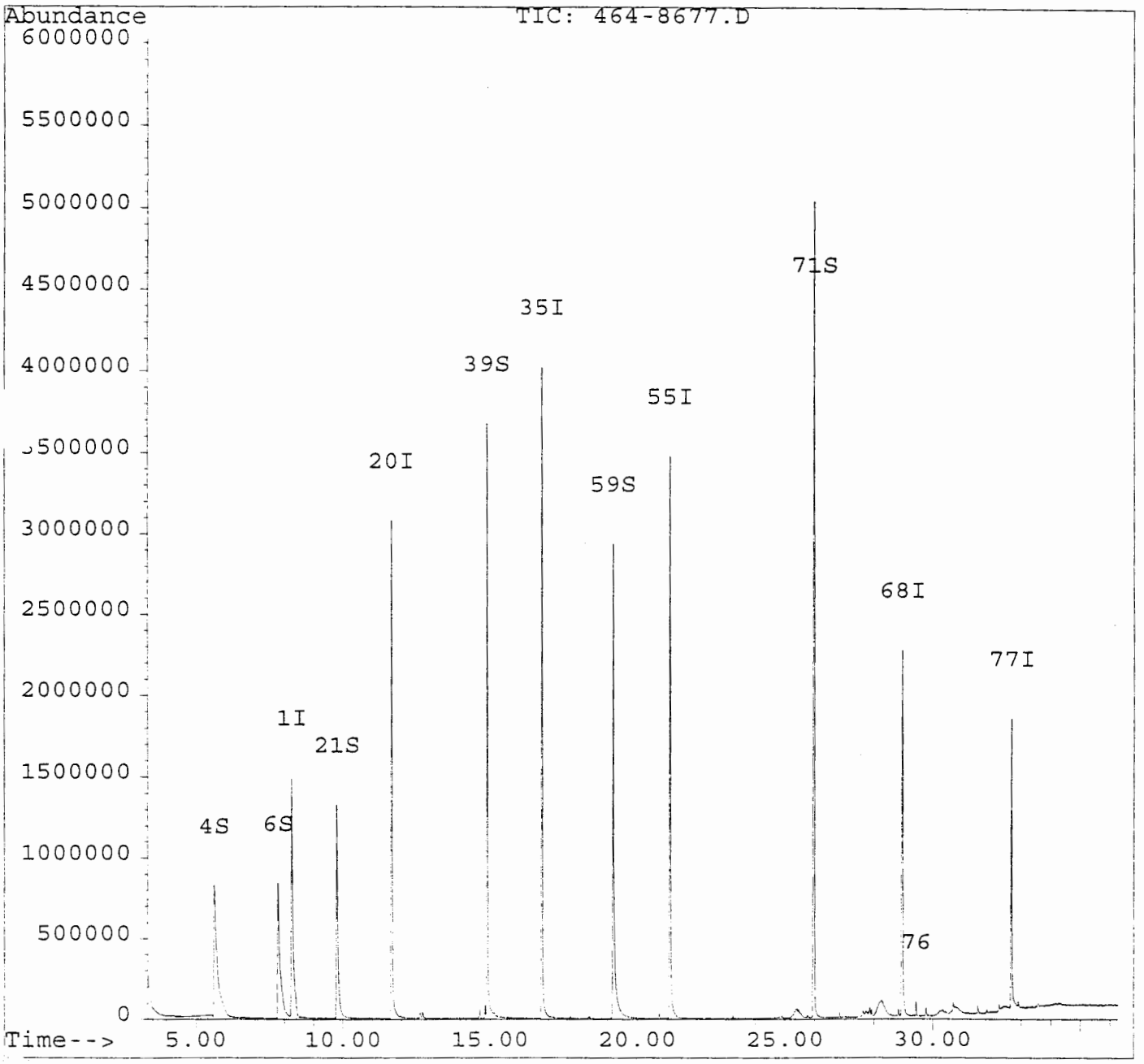
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\464-8677.D
Acq On : 1 Oct 98 12:04 pm
Sample : NMED 84464-8677 8270#092W
Misc : 9/28/98 1000/1 IS:S2,16,6
Quant Time: Oct 1 12:41 1998

Vial: 7
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\464-8678.D
Acq On : 1 Oct 98 12:48 pm
Sample : NMED 84464-8678 8270#092W
Misc : 9/28/98 1000/1 IS:S2,16,6
Quant Time: Oct 1 13:25 1998

Vial: 8
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.25	152	1027617	40.00 ppb	-0.05
20) Naphthalene-d8	11.65	136	3960087	40.00 ppb	-0.05
35) Acenaphthene-d10	16.78	164	2485327	40.00 ppb	-0.05
55) Phenanthrene-d10	21.10	188	3497322	40.00 ppb	-0.04
68) Chyrsene-d12	28.97	240	2140098	40.00 ppb	-0.06
77) Perylene-d12	32.68	264	1448141	40.00 ppb	-0.04
System Monitoring Compounds					**%Recovery**
4) 2-Fluorophenol (s.s.)	5.63	112	3208585	77.70 ppb	38.85%
6) Phenol-d5 (s.s)	7.78	99	3181552	70.65 ppb	35.32%
21) Nitrobenzene-d5 (s.s)	9.80	82	2246997	47.94 ppb	47.94%
39) 2-Fluorobiphenyl (s.s)	14.90	172	4177288	58.74 ppb	58.74%
59) 2,4,6-Tribromophenol (s.s)	19.21	330	1135663	179.68 ppb	89.84%
71) Terphenyl-d14 (s.s)	26.01	244	4545228	96.33 ppb	96.33%
Target Compounds					**Qvalue**
5) 4,6-Dinitro-2-methylphenol	19.21	198	3286	0.31 ppb #	1
76) bis(2-Ethylhexyl)phthalate	29.44	149	53629	0.79 ppb	96

8270 - App IV
ND
10-2-98

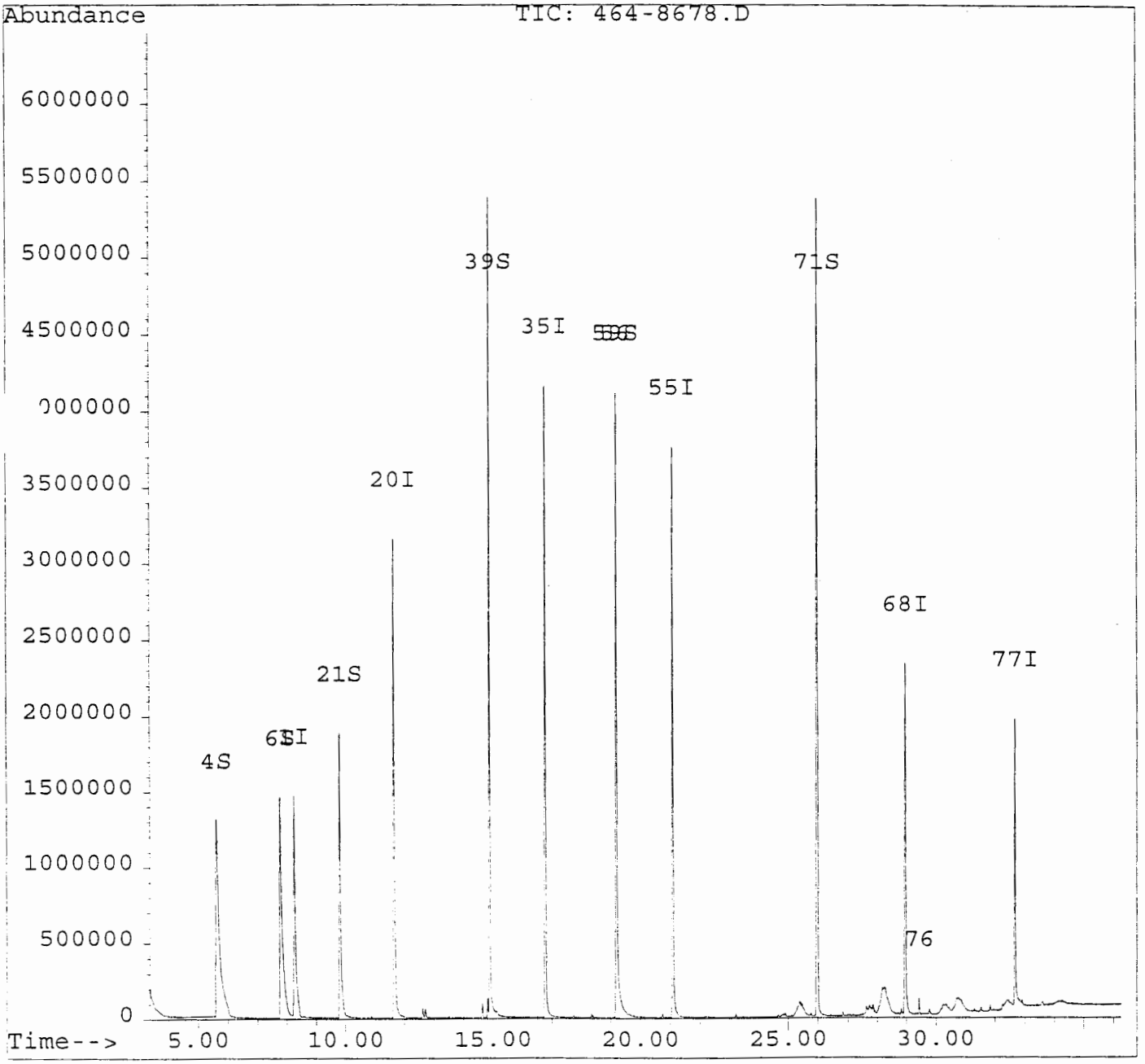
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\464-8678.D
Acq On : 1 Oct 98 12:48 pm
Sample : NMED 84464-8678 8270#092W
Misc : 9/28/98 1000/1 IS:S2,16,6
Quant Time: Oct 1 13:25 1998

Vial: 8
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\464-8680.D Vial: 9
Acq On : 1 Oct 98 1:32 pm Operator: TMJ
Sample : NMED 84464-8680 8270#092W Inst : HP 5971 -
Misc : 9/28/98 1000/1 IS:S2,16,6 Multiplr: 1.00
Quant Time: Oct 1 14:09 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.25	152	1021593	40.00 ppb	-0.04
20) Naphthalene-d8	11.65	136	3864015	40.00 ppb	-0.05
35) Acenaphthene-d10	16.79	164	2421339	40.00 ppb	-0.04
55) Phenanthrene-d10	21.10	188	3428664	40.00 ppb	-0.04
68) Chyrsene-d12	28.97	240	2127254	40.00 ppb	-0.06
77) Perylene-d12	32.68	264	1419052	40.00 ppb	-0.04
System Monitoring Compounds					**%Recovery**
4) 2-Fluorophenol (s.s.)	5.73	112	3725009	90.74 ppb	45.37%
6) Phenol-d5 (s.s)	7.82	99	3387386	75.66 ppb	37.83%
21) Nitrobenzene-d5 (s.s)	9.80	82	2076648	45.41 ppb	45.41%
39) 2-Fluorobiphenyl (s.s)	14.90	172	3750665	54.14 ppb	54.14%
59) 2,4,6-Tribromophenol (s.s)	19.21	330	1161993	187.53 ppb	93.76%
71) Terphenyl-d14 (s.s)	26.00	244	4630936	98.74 ppb	98.74%
rget Compounds					**Qvalue**
5) 4,6-Dinitro-2-methylphenol	19.20	198	3878	0.37 ppb #	1
76) bis(2-Ethylhexyl)phthalate	29.44	149	70140	1.04 ppb	98

8270 - App IX
ND
10-2-98

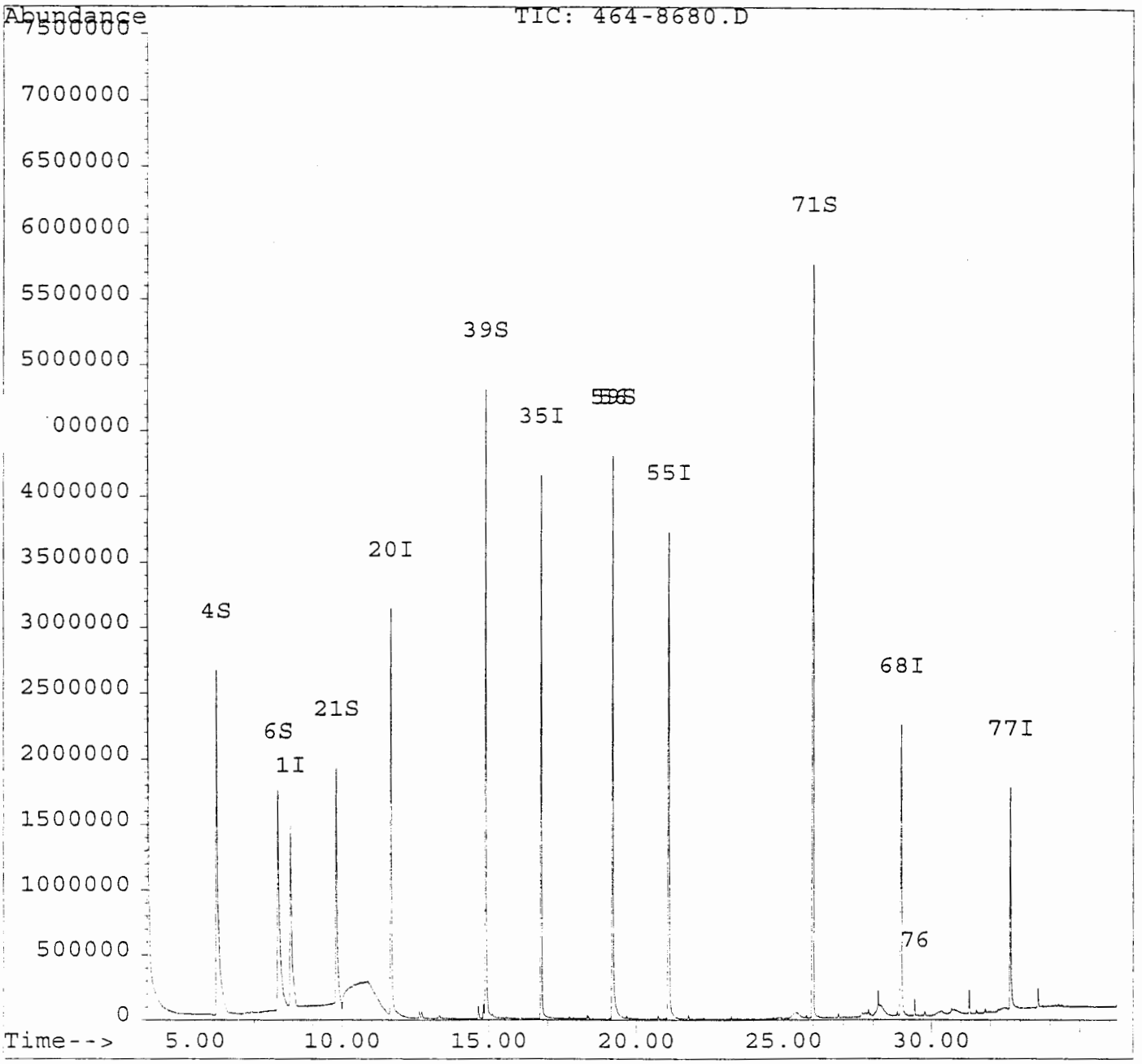
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\464-8680.D
Acq On : 1 Oct 98 1:32 pm
Sample : NMED 84464-8680 8270#092W
Misc : 9/28/98 1000/1 IS:S2,16,6
Quant Time: Oct 1 14:09 1998

Vial: 9
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\464-8681.D
Acq On : 1 Oct 98 2:16 pm
Sample : NMED 84464-8681 8270#092W
Misc : 9/28/98 1000/1 IS:S2,16,6
Quant Time: Oct 1 14:53 1998

Vial: 10
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.25	152	1049636	40.00 ppb	-0.04
20) Naphthalene-d8	11.65	136	3959411	40.00 ppb	-0.05
35) Acenaphthene-d10	16.79	164	2436043	40.00 ppb	-0.04
55) Phenanthrene-d10	21.10	188	3379971	40.00 ppb	-0.04
68) Chyrsene-d12	28.97	240	2122072	40.00 ppb	-0.06
77) Perylene-d12	32.68	264	1419632	40.00 ppb	-0.04

System Monitoring Compounds					%Recovery
4) 2-Fluorophenol (s.s.)	5.70	112	2885926	68.42 ppb	34.21%
6) Phenol-d5 (s.s)	7.81	99	2683715	58.34 ppb	29.17%
21) Nitrobenzene-d5 (s.s)	9.80	82	1586722	33.86 ppb	33.86%
39) 2-Fluorobiphenyl (s.s)	14.89	172	2790322	40.03 ppb	40.03%
59) 2,4,6-Tribromophenol (s.s)	19.21	330	953001	156.01 ppb	78.01%
71) Terphenyl-d14 (s.s)	26.00	244	3806822	81.36 ppb	81.36%

rget Compounds					Qvalue
5) bis(2-Ethylhexyl)phthalate	29.43	149	70142	1.04 ppb	96

8270 - App IX
ND
M 10-2-98

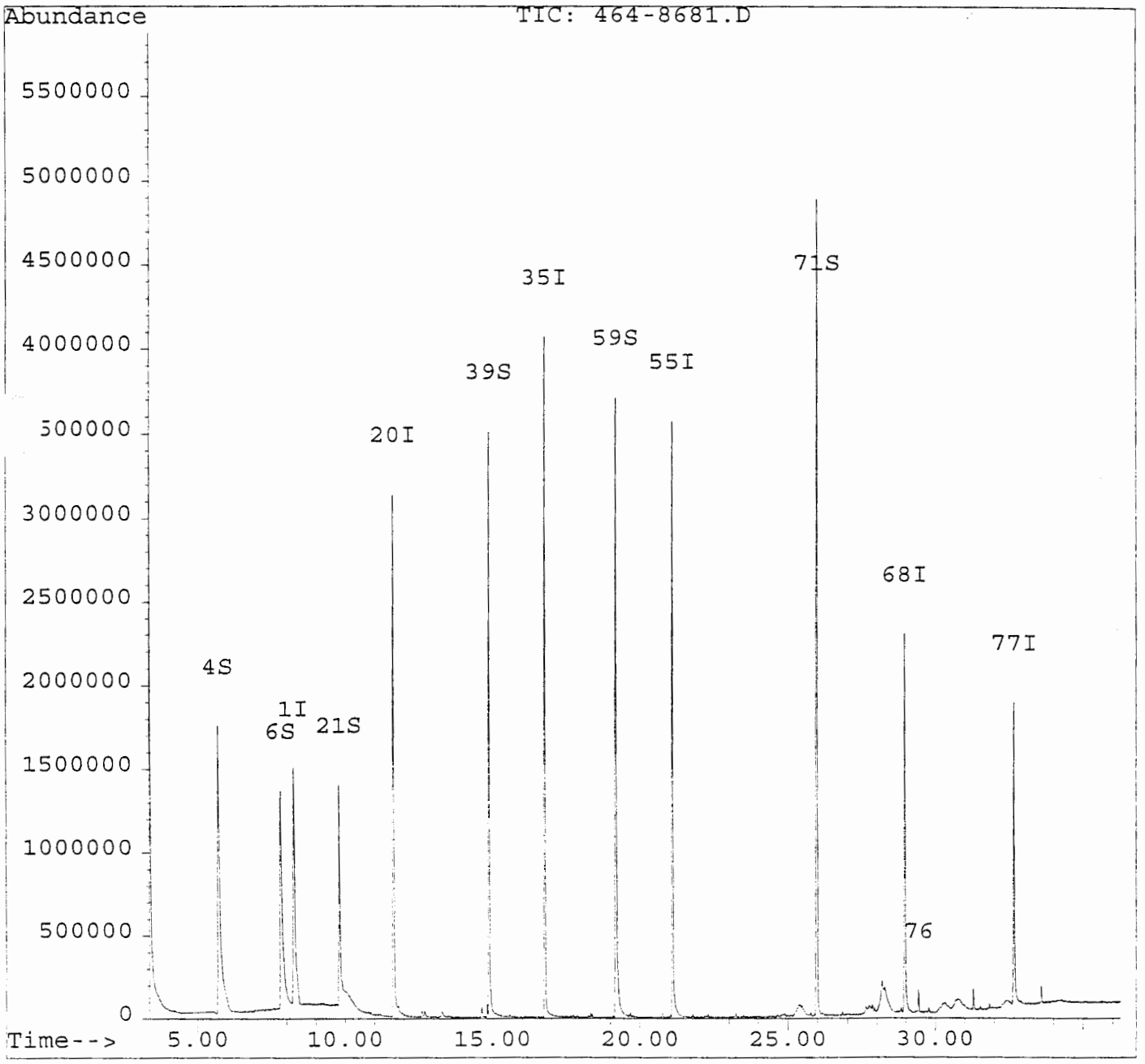
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\464-8681.D
Acq On : 1 Oct 98 2:16 pm
Sample : NMED 84464-8681 8270#092W
Misc : 9/28/98 1000/1 IS:S2,16,6
Quant Time: Oct 1 14:53 1998

Vial: 10
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\464-8682.D
Acq On : 1 Oct 98 3:00 pm
Sample : NMED 84464-8682 8270#092W
Misc : 9/28/98 1000/1 IS:S2,16,6
Quant Time: Oct 1 15:37 1998

Vial: 11
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.25	152	1125369	40.00 ppb	-0.05
20) Naphthalene-d8	11.65	136	4041582	40.00 ppb	-0.05
35) Acenaphthene-d10	16.78	164	2503956	40.00 ppb	-0.05
55) Phenanthrene-d10	21.11	188	3570169	40.00 ppb	-0.04
68) Chyrsene-d12	28.97	240	2269124	40.00 ppb	-0.06
77) Perylene-d12	32.68	264	1485702	40.00 ppb	-0.04
System Monitoring Compounds					**%Recovery**
4) 2-Fluorophenol (s.s.)	5.66	112	1666603	36.85 ppb	18.43%
6) Phenol-d5 (s.s)	7.81	99	1616290	32.77 ppb	16.39%
21) Nitrobenzene-d5 (s.s)	9.80	82	1484186	31.03 ppb	31.03%
39) 2-Fluorobiphenyl (s.s)	14.89	172	2498924	34.88 ppb	34.88%
59) 2,4,6-Tribromophenol (s.s)	19.20	330	766221	118.75 ppb	59.38%
71) Terphenyl-d14 (s.s)	26.00	244	3973634	79.42 ppb	79.42%
rget Compounds					**Qvalue**
5) bis(2-Ethylhexyl)phthalate	29.44	149	117876	1.63 ppb	96

8270 - App IX
ND
10-2-98

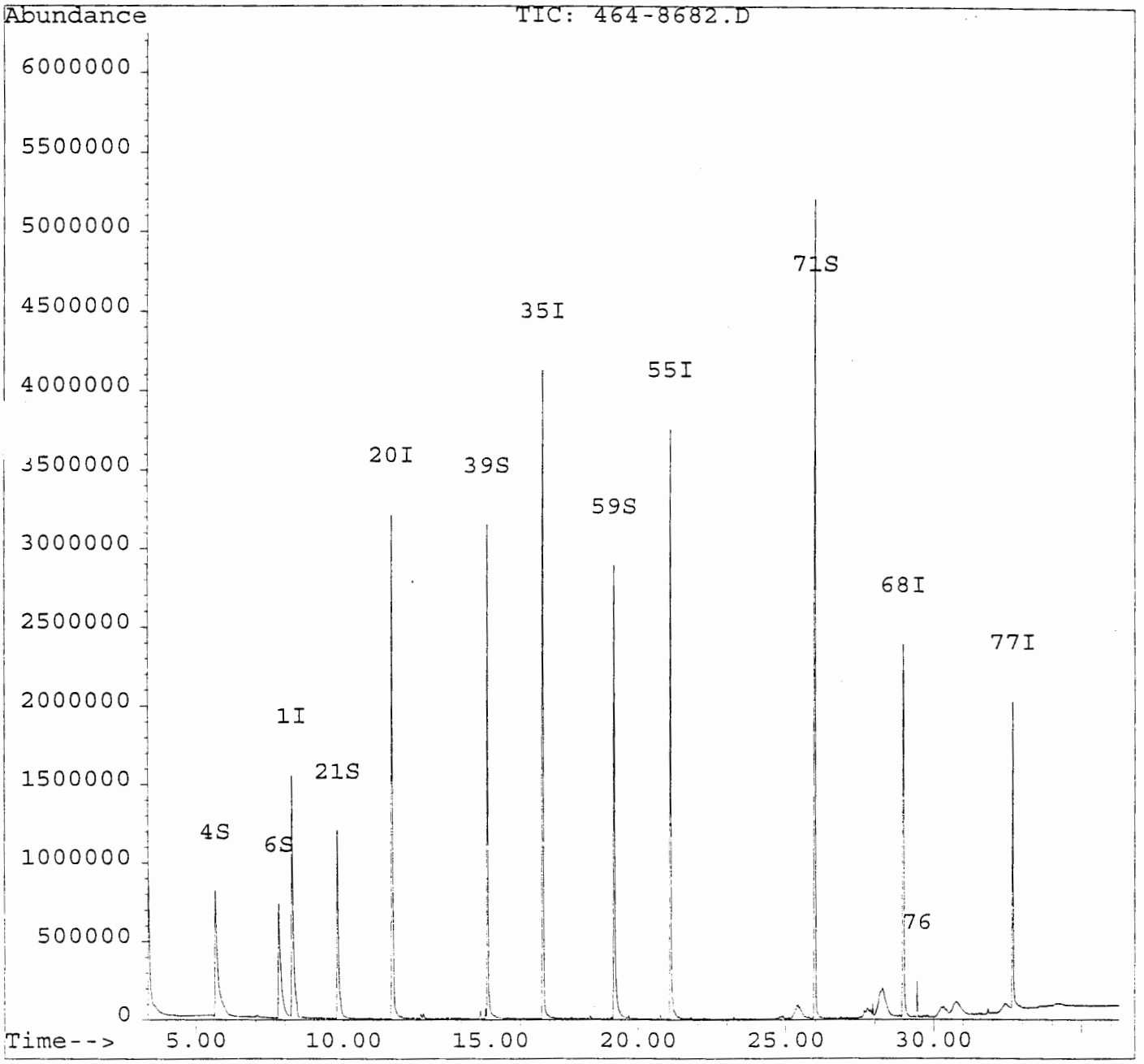
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\464-8682.D
Acq On : 1 Oct 98 3:00 pm
Sample : NMED 84464-8682 8270#092W
Misc : 9/28/98 1000/1 IS:S2,16,6
Quant Time: Oct 1 15:37 1998

Vial: 11
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\E01OCT98\492-8739.D
Acq On : 1 Oct 98 1:17 pm
Sample : NMHR 84492-8739 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 1 14:02 1998

Vial: 8
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Thu Oct 01 13:17:28 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.33	152	1632374	40.00 ppb	-0.03
20) Naphthalene-d8	12.98	136	6626827	40.00 ppb	-0.04
35) Acenaphthene-d10	18.44	164	3852419	40.00 ppb	-0.04
55) Phenanthrene-d10	23.03	188	6377820	40.00 ppb	-0.04
68) Chyrsene-d12	31.36	240	5549854	40.00 ppb	-0.05
77) Perylene-d12	36.51	264	4853489	40.00 ppb	-0.06

System Monitoring Compounds					%Recovery
4) 2-Fluorophenol (s.s)	6.43	112	4313829	78.87 ppb	39.43%
6) Phenol-d5 (s.s)	8.79	99	4131175	63.38 ppb	31.69%
21) Nitrobenzene-d5 (s.s)	11.00	82	4691426	75.10 ppb	75.10%
39) 2-Fluorobiphenyl (s.s)	16.45	172	7795614	70.27 ppb	70.27%
59) 2,4,6-Tribromophenol (s.s)	20.99	330	2297880	161.41 ppb	80.71%
71) Terphenyl-d14 (s.s)	28.21	244	9570089	77.43 ppb	77.43%

Target Compounds					Qvalue
44) 2,6-Dinitrotoluene	18.44	165	501305	~~15.35~~ ppb	# 38

8270
ND
M
10-2-98

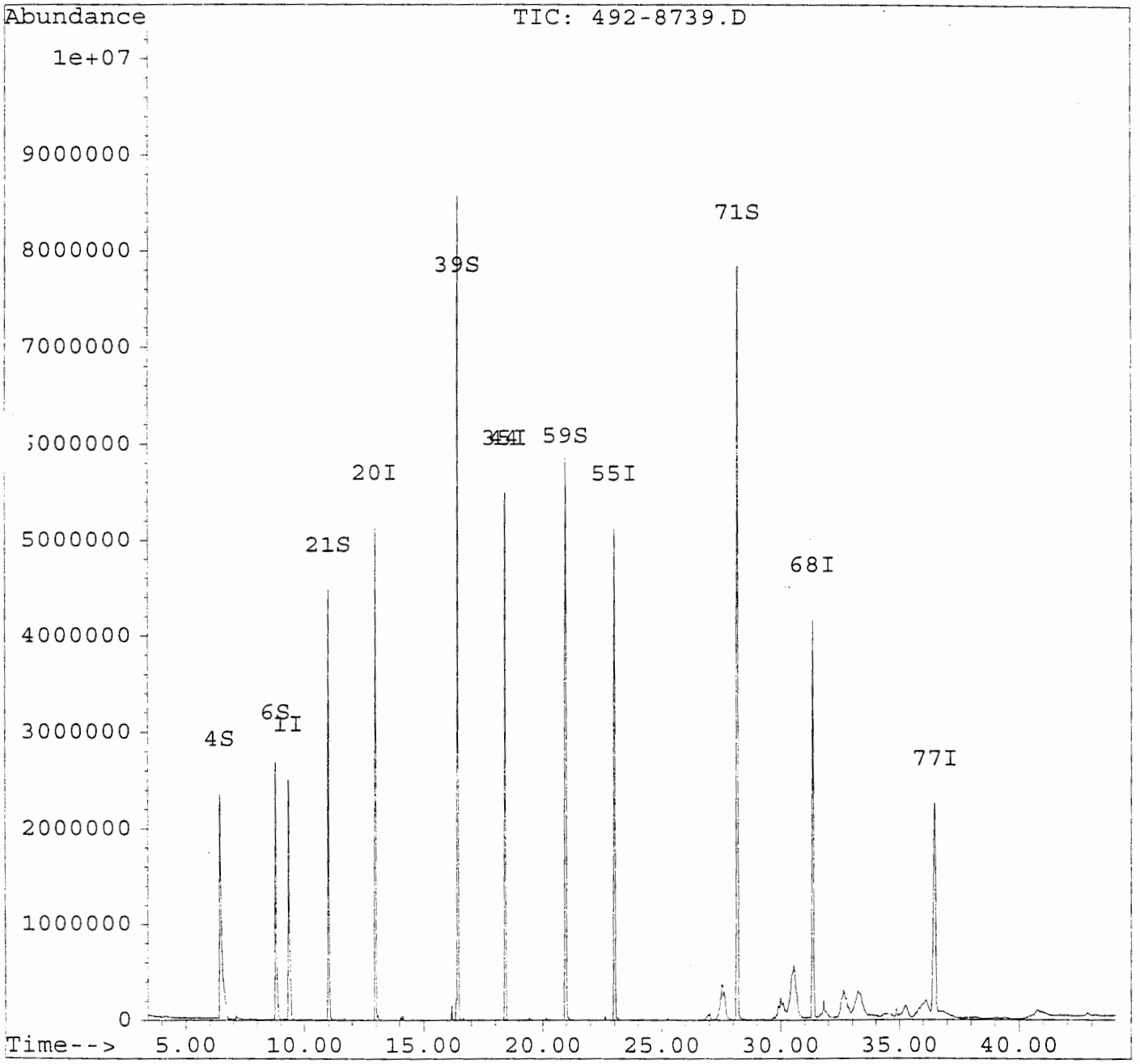
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E01OCT98\492-8739.D
Acq On : 1 Oct 98 1:17 pm
Sample : NMHR 84492-8739 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 1 14:02 1998

Vial: 8
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Thu Oct 01 13:17:28 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\E01OCT98\492-8740.D Vial: 9
Acq On : 1 Oct 98 2:11 pm Operator: TMJ
Sample : NMHR 84492-8740 8270#093W Inst : INST-E
Misc : 9/29/98 1000/1 IS S2,16,6 Multiplr: 1.00
Quant Time: Oct 1 14:56 1998

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Thu Oct 01 13:17:28 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.35	152	2059840	40.00 ppb	-0.02
20) Naphthalene-d8	12.99	136	8285793	40.00 ppb	-0.03
35) Acenaphthene-d10	18.44	164	4873913	40.00 ppb	-0.04
55) Phenanthrene-d10	23.03	188	8035070	40.00 ppb	-0.04
68) Chyrsene-d12	31.37	240	6967068	40.00 ppb	-0.04
77) Perylene-d12	36.53	264	6443311	40.00 ppb	-0.05

System Monitoring Compounds					%Recovery
4) 2-Fluorophenol (s.s)	6.45	112	5142043	74.50 ppb	37.25%
6) Phenol-d5 (s.s)	8.79	99	4609917	56.05 ppb	28.02%
21) Nitrobenzene-d5 (s.s)	11.01	82	5796151	74.20 ppb	74.20%
39) 2-Fluorobiphenyl (s.s)	16.46	172	8937963	63.68 ppb	63.68%
59) 2,4,6-Tribromophenol (s.s)	20.99	330	2639529	147.17 ppb	73.58%
71) Terphenyl-d14 (s.s)	28.22	244	11295124	72.80 ppb	72.80%

Target Compounds						Qvalue
16) n-Nitroso-di-n-propylamine	11.01	70	851730	17.76 ppb	#	49
44) 2,6-Dinitrotoluene	18.44	165	622354	15.06 ppb	#	38

8270
ND
M
10-2-98

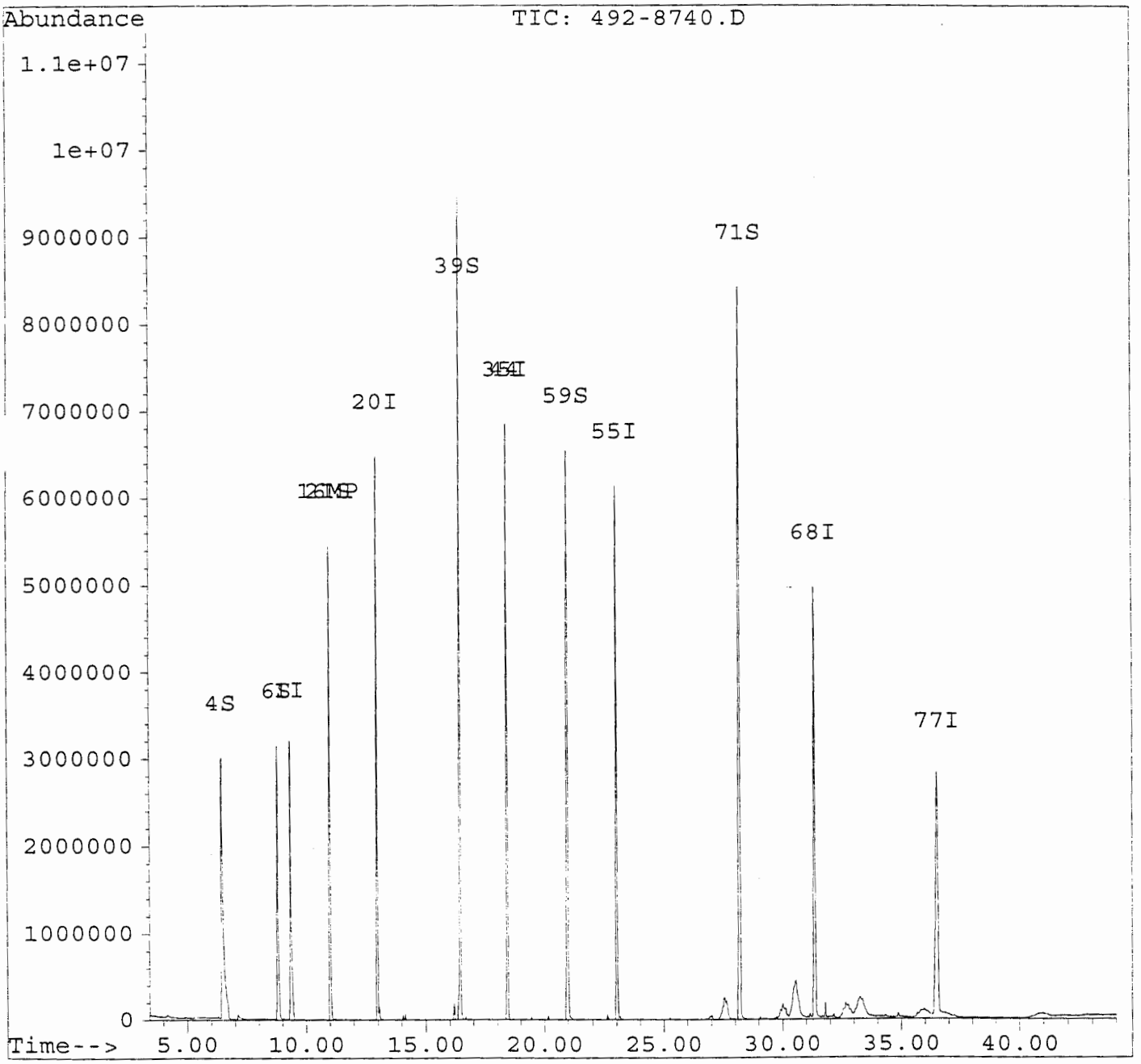
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E01OCT98\492-8740.D
Acq On : 1 Oct 98 2:11 pm
Sample : NMHR 84492-8740 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 1 14:56 1998

Vial: 9
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Thu Oct 01 13:17:28 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\E01OCT98\492-8741.D
Acq On : 1 Oct 98 3:05 pm
Sample : NMHR 84492-8741 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 1 15:50 1998

Vial: 10
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Thu Oct 01 13:17:28 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.33	152	1911081	40.00 ppb	-0.03
20) Naphthalene-d8	12.99	136	7528462	40.00 ppb	-0.03
35) Acenaphthene-d10	18.44	164	4308221	40.00 ppb	-0.04
55) Phenanthrene-d10	23.04	188	7370928	40.00 ppb	-0.03
68) Chyrsene-d12	31.37	240	6376750	40.00 ppb	-0.04
77) Perylene-d12	36.51	264	5868927	40.00 ppb	-0.07
System Monitoring Compounds					**%Recovery**
4) 2-Fluorophenol (s.s)	6.46	112	4411978	68.90 ppb	34.45%
6) Phenol-d5 (s.s)	8.80	99	4283596	56.13 ppb	28.07%
21) Nitrobenzene-d5 (s.s)	11.01	82	5350226	75.38 ppb	75.38%
39) 2-Fluorobiphenyl (s.s)	16.46	172	8072379	65.07 ppb	65.07%
59) 2,4,6-Tribromophenol (s.s)	20.99	330	2782608	169.12 ppb	84.56%
71) Terphenyl-d14 (s.s)	28.22	244	10837996	76.32 ppb	76.32%
Target Compounds					**Qvalue**
44) 2,6-Dinitrotoluene	18.44	165	545453	~~14.93~~ ppb	# 37
76) bis(2-Ethylhexyl)phthalate	31.81	149	238426	1.12 ppb	# 96

8270
ND
M
10-2-98

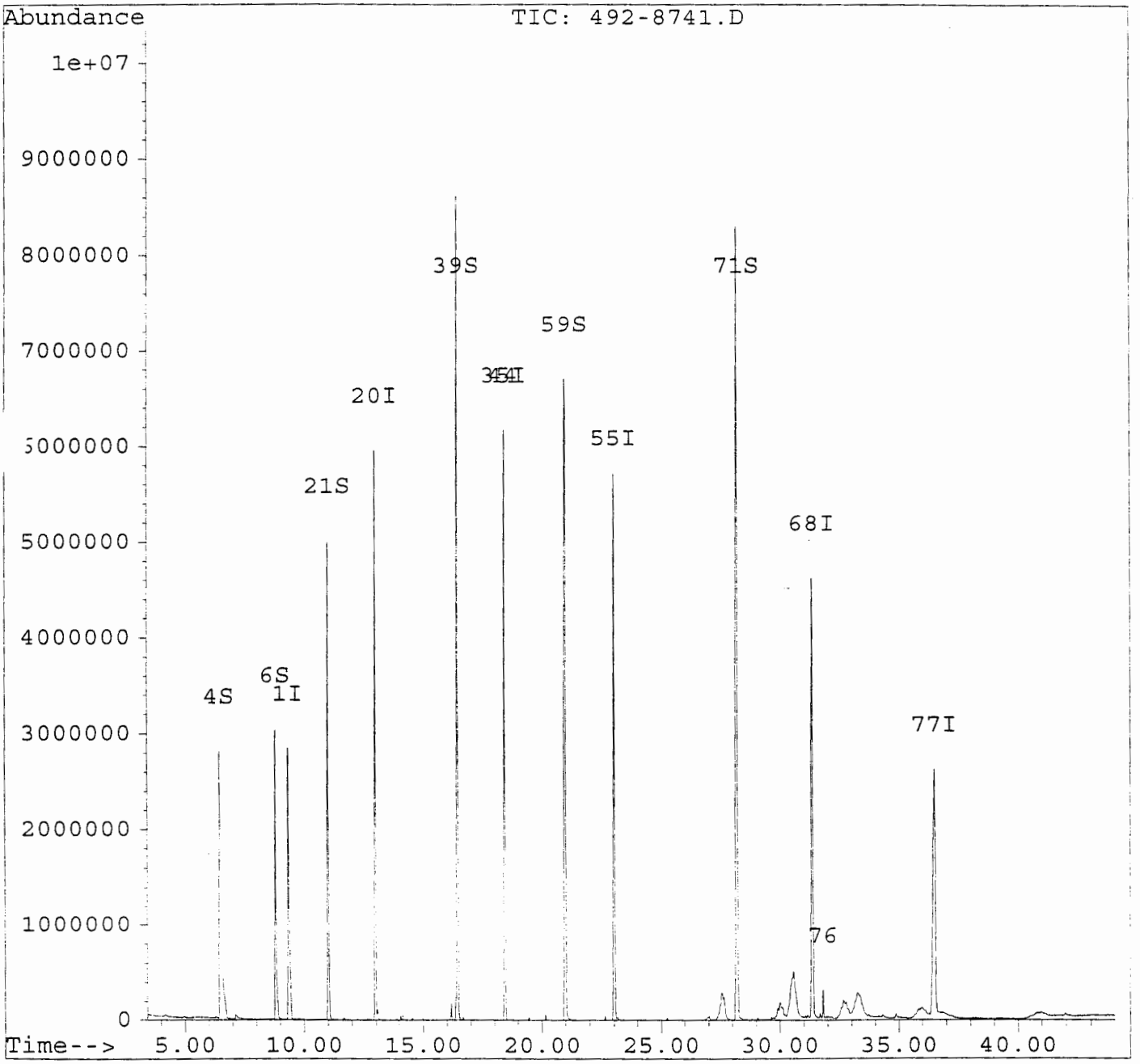
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E01OCT98\492-8741.D
Acq On : 1 Oct 98 3:05 pm
Sample : NMHR 84492-8741 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 1 15:50 1998

Vial: 10
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Thu Oct 01 13:17:28 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\E01OCT98\492-8742.D
Acq On : 1 Oct 98 3:59 pm
Sample : NMHR 84492-8742 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 1 16:43 1998

Vial: 11
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Thu Oct 01 16:31:34 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.34	152	1973831	40.00 ppb	-0.02
20) Naphthalene-d8	12.99	136	7686292	40.00 ppb	-0.03
35) Acenaphthene-d10	18.44	164	4441369	40.00 ppb	-0.04
55) Phenanthrene-d10	23.03	188	7614579	40.00 ppb	-0.04
68) Chyrsene-d12	31.37	240	6791124	40.00 ppb	-0.03
77) Perylene-d12	36.53	264	6123227	40.00 ppb	-0.04

System Monitoring Compounds					%Recovery
4) 2-Fluorophenol (s.s)	6.46	112	3296481	49.84 ppb	24.92%
6) Phenol-d5 (s.s)	8.80	99	3192943	40.51 ppb	20.26%
21) Nitrobenzene-d5 (s.s)	11.02	82	5377312	74.21 ppb	74.21%
39) 2-Fluorobiphenyl (s.s)	16.46	172	8167229	63.86 ppb	63.86%
59) 2,4,6-Tribromophenol (s.s)	21.00	330	2557650	150.48 ppb	75.24%
71) Terphenyl-d14 (s.s)	28.23	244	11746237	77.67 ppb	77.67%

Target Compounds					Qvalue
44) 2,6-Dinitrotoluene	18.44	165	573226	~~15.22~~ ppb	# 38

8270
ND
M
10-2-98

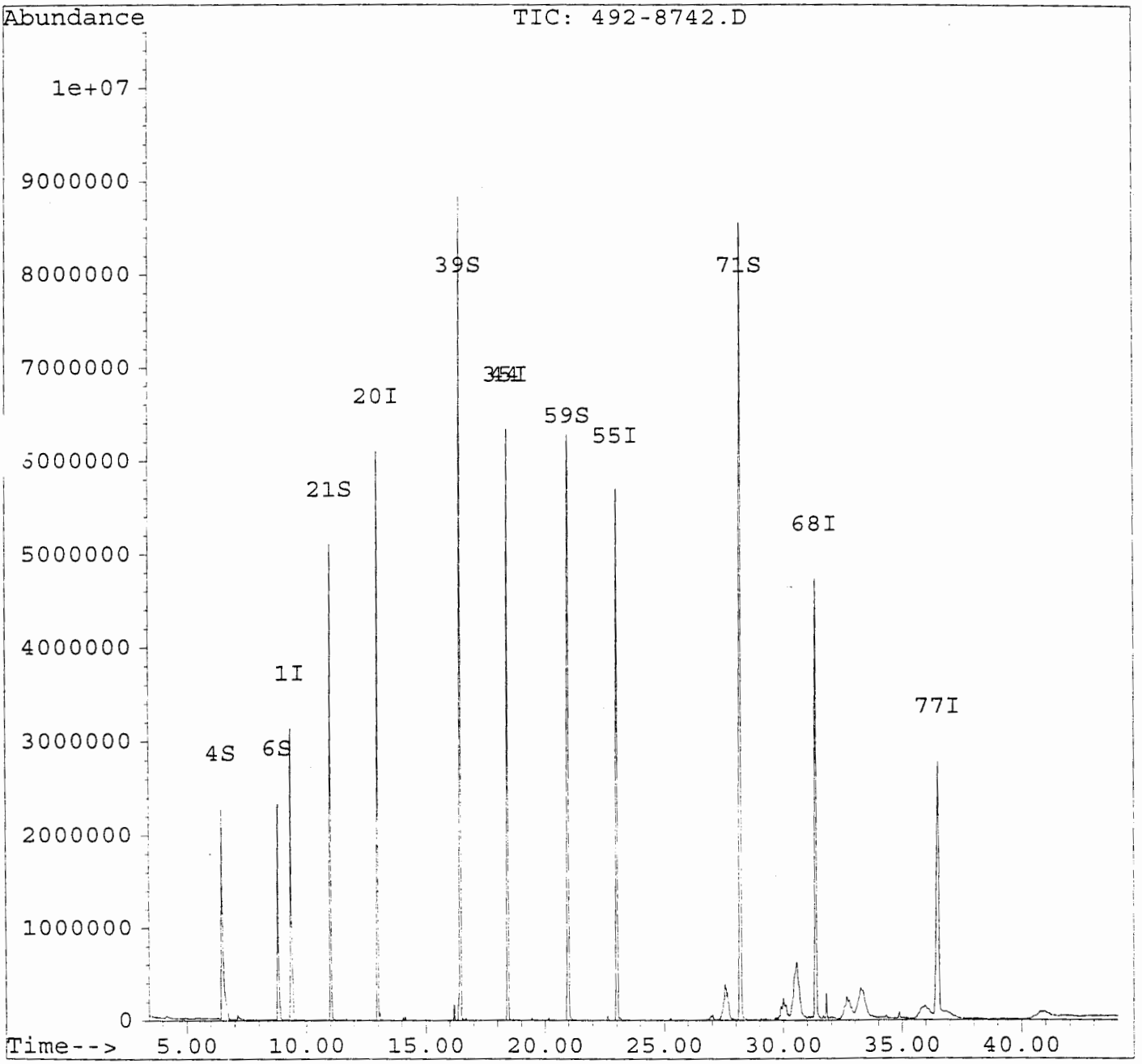
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E01OCT98\492-8742.D
Acq On : 1 Oct 98 3:59 pm
Sample : NMHR 84492-8742 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 1 16:43 1998

Vial: 11
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Thu Oct 01 16:31:34 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\E01OCT98\492-8743.D
Acq On : 1 Oct 98 4:53 pm
Sample : NMHR 84492-8743 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 1 17:37 1998

Vial: 12
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Thu Oct 01 16:31:34 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.35	152	2068470	40.00 ppb	-0.02
20) Naphthalene-d8	12.99	136	7962105	40.00 ppb	-0.03
35) Acenaphthene-d10	18.45	164	4609126	40.00 ppb	-0.03
55) Phenanthrene-d10	23.04	188	8020740	40.00 ppb	-0.03
68) Chyrsene-d12	31.38	240	7057512	40.00 ppb	-0.03
77) Perylene-d12	36.53	264	6289641	40.00 ppb	-0.04
System Monitoring Compounds					**%Recovery**
4) 2-Fluorophenol (s.s)	6.46	112	5164308	74.51 ppb	37.25%
6) Phenol-d5 (s.s)	8.80	99	4649836	56.30 ppb	28.15%
21) Nitrobenzene-d5 (s.s)	11.02	82	4988933	66.47 ppb	66.47%
39) 2-Fluorobiphenyl (s.s)	16.46	172	7964158	60.00 ppb	60.00%
59) 2,4,6-Tribromophenol (s.s)	21.00	330	2783965	155.50 ppb	77.75%
71) Terphenyl-d14 (s.s)	28.23	244	10577623	67.30 ppb	67.30%
Target Compounds					**Qvalue**
16) n-Nitroso-di-n-propylamine	11.01	70	723760	~~15.03~~ ppb	# 48
44) 2,6-Dinitrotoluene	18.44	165	605906	~~15.51~~ ppb	# 38
76) bis(2-Ethylhexyl)phthalate	31.80	149	247241	1.05 ppb	# 94

8270
ND
M
10-2-98

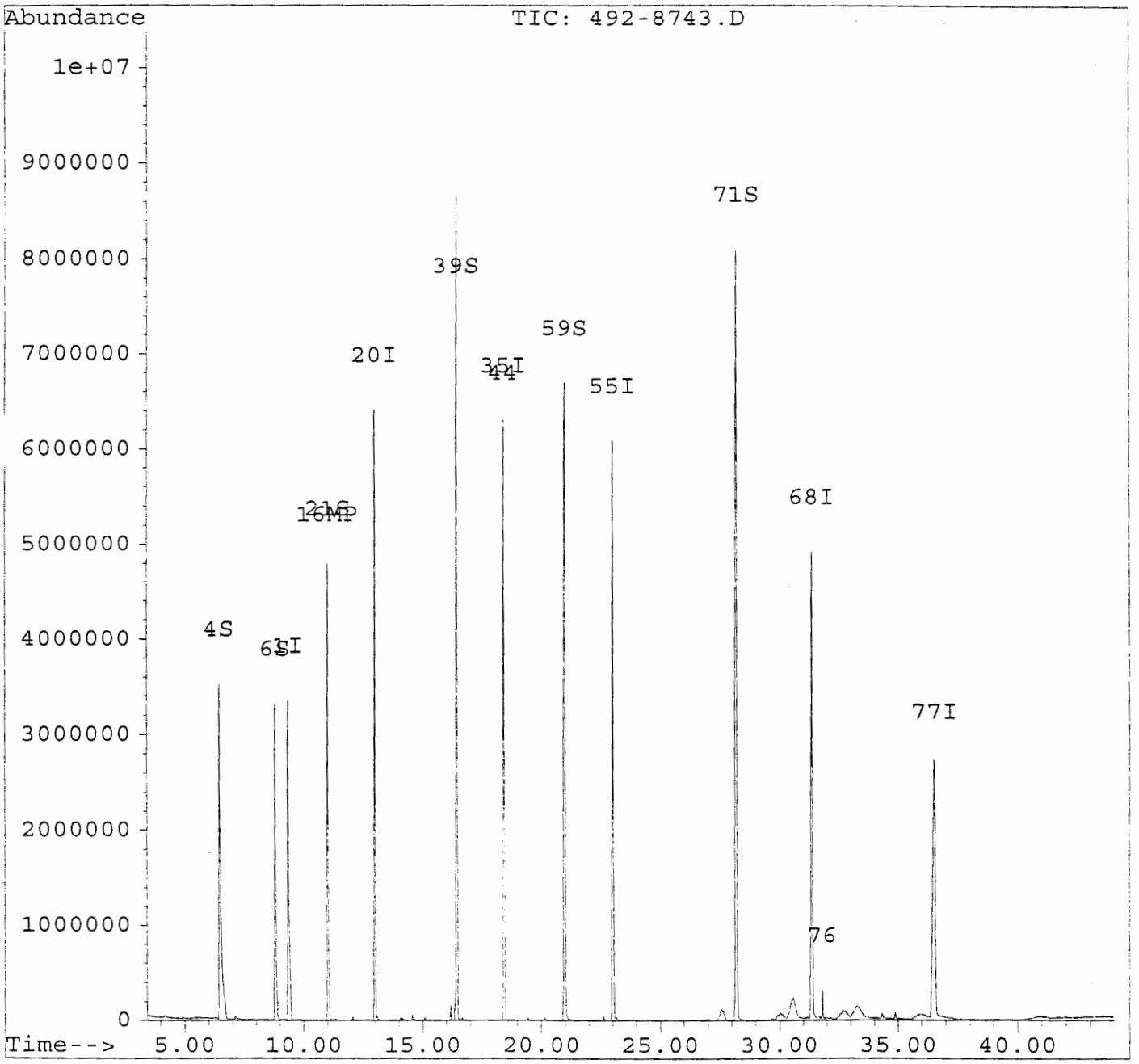
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E01OCT98\492-8743.D
Acq On : 1 Oct 98 4:53 pm
Sample : NMHR 84492-8743 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 1 17:37 1998

Vial: 12
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Thu Oct 01 16:31:34 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\E01OCT98\492-8746.D Vial: 15
Acq On : 1 Oct 98 7:32 pm Operator: TMJ
Sample : NMHR 84492-8746 8270#093W Inst : INST-E
Misc : 9/29/98 1000/1 IS S2,16,6 Multiplr: 1.00
Quant Time: Oct 1 20:17 1998

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Thu Oct 01 16:31:34 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.35	152	1735757	40.00	ppb	-0.02
20) Naphthalene-d8	12.99	136	6671191	40.00	ppb	-0.03
35) Acenaphthene-d10	18.45	164	3798994	40.00	ppb	-0.04
55) Phenanthrene-d10	23.04	188	6582778	40.00	ppb	-0.03
68) Chyrsene-d12	31.37	240	6001072	40.00	ppb	-0.03
77) Perylene-d12	36.52	264	5321196	40.00	ppb	-0.06
System Monitoring Compounds						**%Recovery**
4) 2-Fluorophenol (s.s)	6.46	112	4977768	85.58	ppb	42.79%
6) Phenol-d5 (s.s)	8.80	99	4577404	66.04	ppb	33.02%
21) Nitrobenzene-d5 (s.s)	11.01	82	4864738	77.35	ppb	77.35%
39) 2-Fluorobiphenyl (s.s)	16.45	172	7507687	68.63	ppb	68.63%
59) 2,4,6-Tribromophenol (s.s)	20.99	330	2577722	175.43	ppb	87.71%
71) Terphenyl-d14 (s.s)	28.23	244	10628607	79.53	ppb	79.53%
Target Compounds						**Qvalue**
16) n-Nitroso-di-n-propylamine	11.01	70	710962	~~17.59~~	ppb #	48
44) 2,6-Dinitrotoluene	18.45	165	484851	~~15~~.05	ppb #	38
48) 4-Nitrophenol	19.07	109	40086	2.05	ppb #	1
58) 1,2-Diphenylhydrazine	20.81	77	651122	2.43	ppb #	1

8270
ND
M 10-2-98

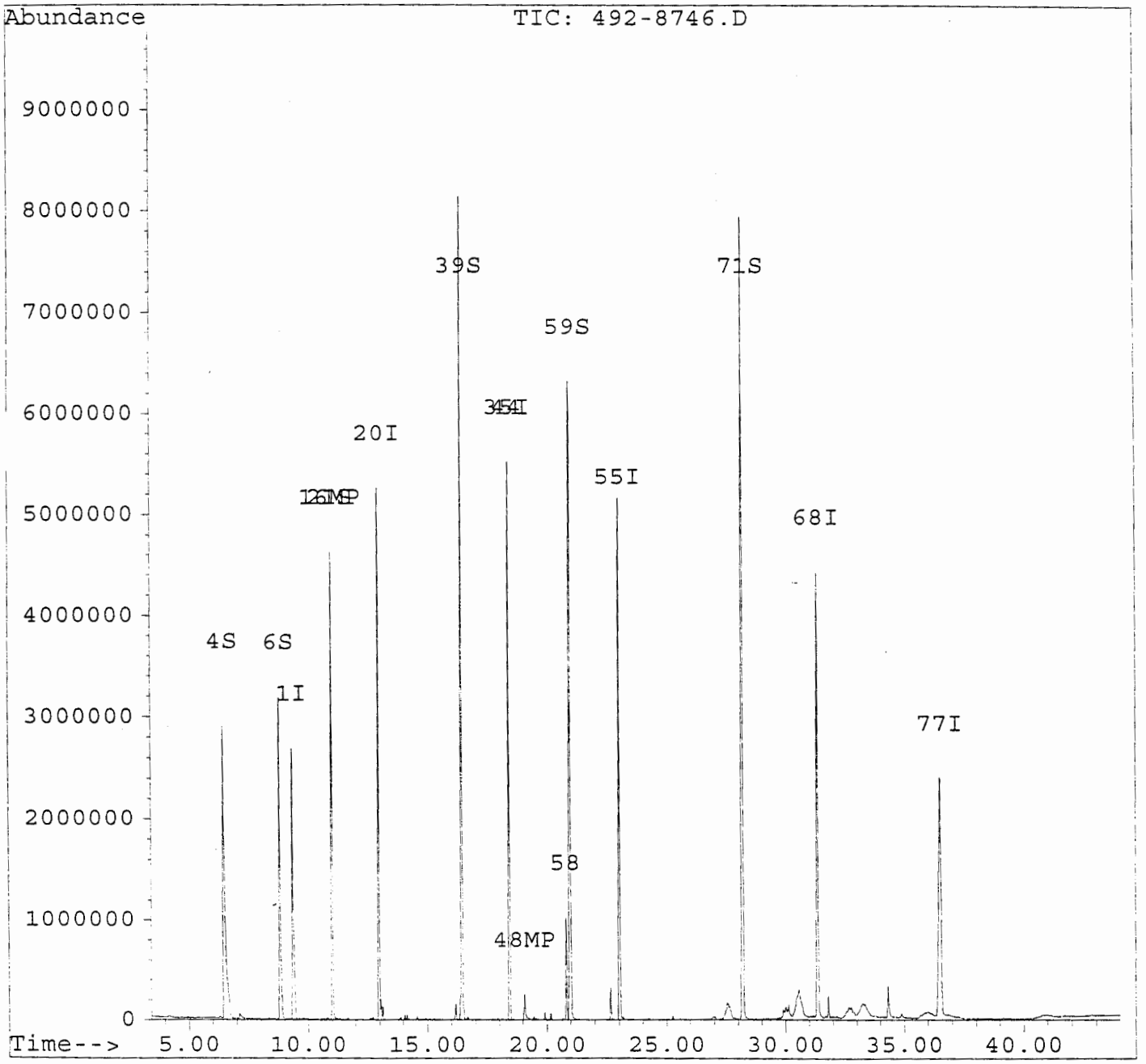
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E01OCT98\492-8746.D
Acq On : 1 Oct 98 7:32 pm
Sample : NMHR 84492-8746 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 1 20:17 1998

Vial: 15
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Thu Oct 01 16:31:34 1998
Response via : Multiple Level Calibration

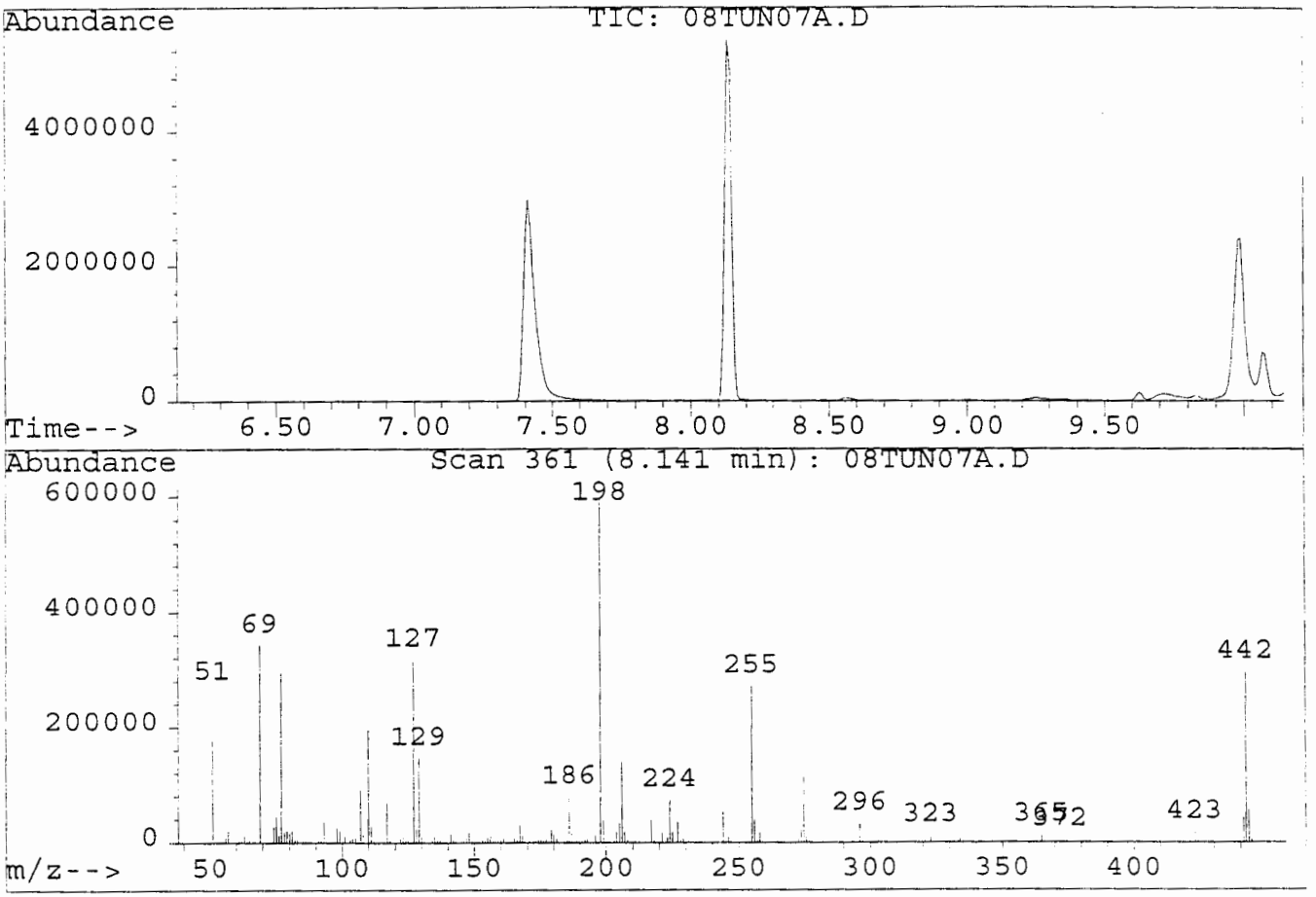


DFTPP Ion abundance criteria

Data File : C:\HPCHEM\1\DATA\F07AUG98\08TUN07A.D
Acq On : 7 Aug 98 10:41 am
Sample : dftpp tune S2,10,4
Misc :

Vial: 1
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625



Peak Apex is scan: 361

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	43.9	261824	PASS
68	69	0	2	0.0	0	PASS
70	69	0	2	0.4	1504	PASS
127	198	40	60	53.3	318208	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	596544	PASS
199	198	5	9	6.6	39520	PASS
275	198	10	30	18.9	113016	PASS
365	198	1	100	2.1	12594	PASS
441	443	0	100	75.0	42304	PASS
442	198	40	100	49.7	296576	PASS
443	442	17	23	19.0	56424	PASS

M 8-10-98

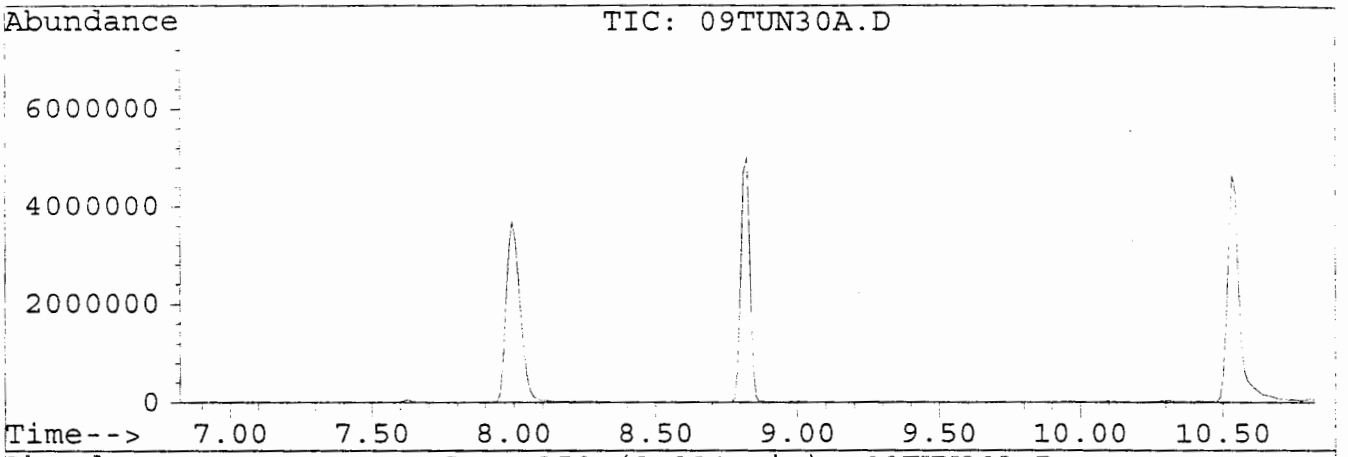
08TUN07A.D 8270-39F.M Mon Aug 10 09:18:14 1998

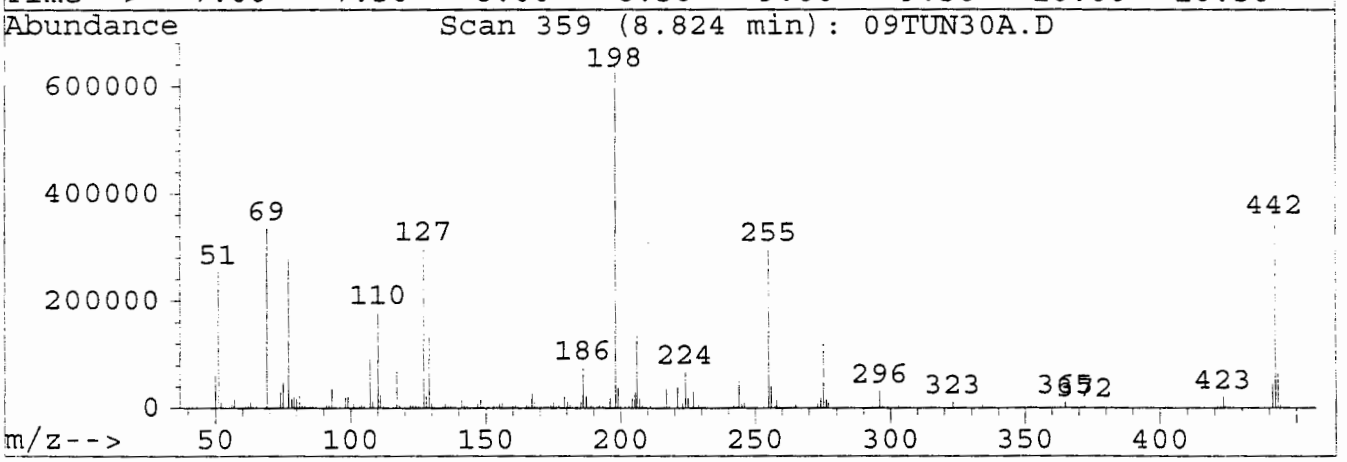
DFTPP Ion abundance criteria

Data File : C:\HPCHEM\1\DATA\E30SEP98\09TUN30A.D
Acq On : 30 Sep 98 8:15 am
Sample : DFTPP Tune Ck S2,16,1
Misc :

Vial: 1
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625





Peak Apex is scan: 359

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	39.3	254784	PASS
68	69	0	2	0.0	0	PASS
70	69	0	2	0.5	1546	PASS
127	198	40	60	46.0	298176	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	648832	PASS
199	198	5	9	6.1	39296	PASS
275	198	10	30	19.2	124256	PASS
365	198	1	100	1.8	11880	PASS
441	443	0	100	65.3	45144	PASS
442	198	40	100	53.6	347968	PASS
443	442	17	23	19.9	69152	PASS

TM 9-30-98

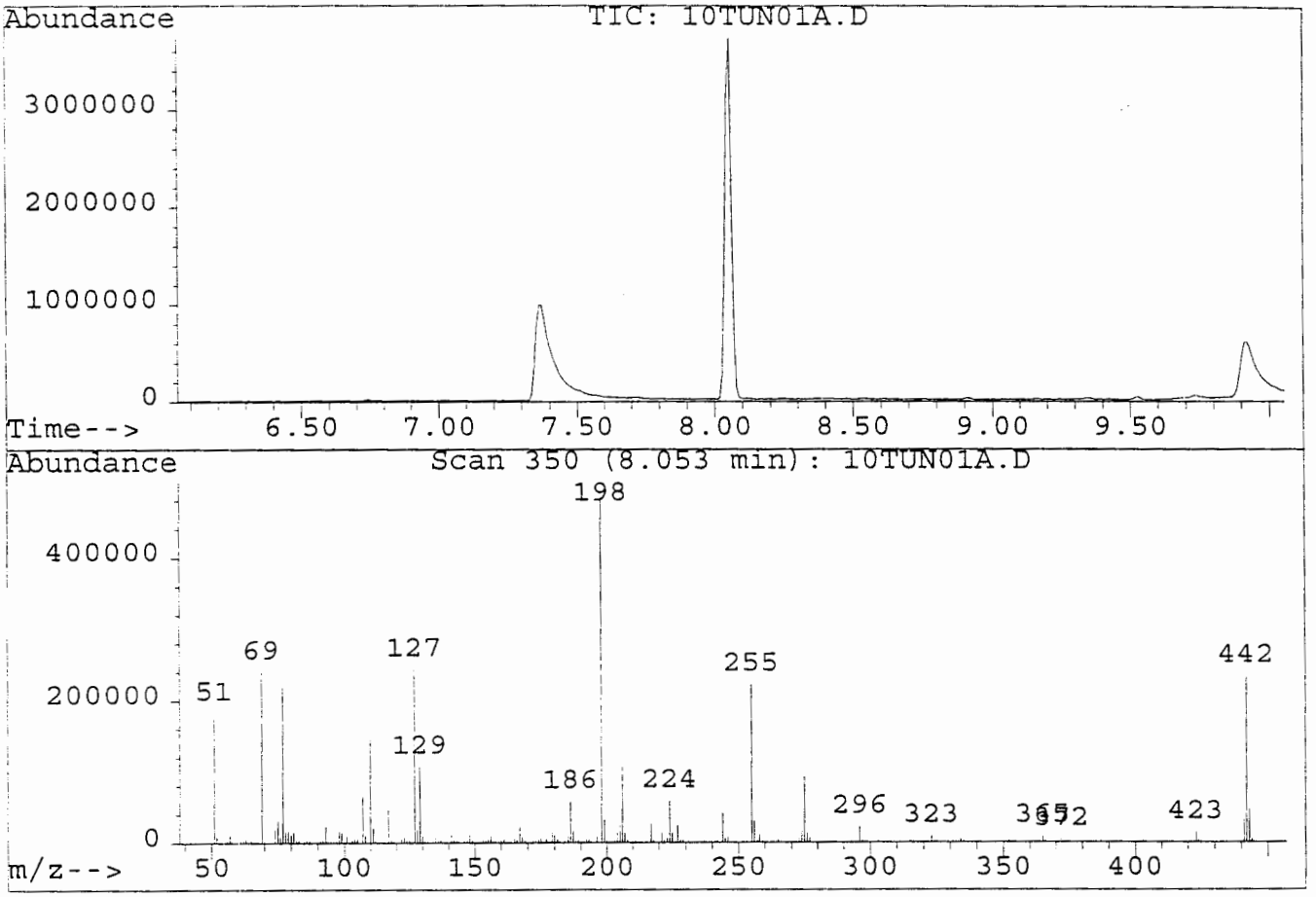
09TUN30A.D 8270-72.M Wed Sep 30 15:45:27 1998

DFTPP Ion abundance criteria

Data File : C:\HPCHEM\1\DATA\F01OCT98\10TUN01A.D
Acq On : 1 Oct 98 8:48 am
Sample : dftpp tune S2,16,2
Misc :

Vial: 1
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625



Peak Apex is scan: 350

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.1	183552	PASS
68	69	0	2	0.0	0	PASS
70	69	0	2	0.6	1369	PASS
127	198	40	60	50.7	244032	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	481664	PASS
199	198	5	9	6.8	32576	PASS
275	198	10	30	19.2	92712	PASS
365	198	1	100	1.9	9204	PASS
441	443	0	100	69.3	32136	PASS
442	198	40	100	48.6	234304	PASS
443	442	17	23	19.8	46400	PASS

TM 10-12-98

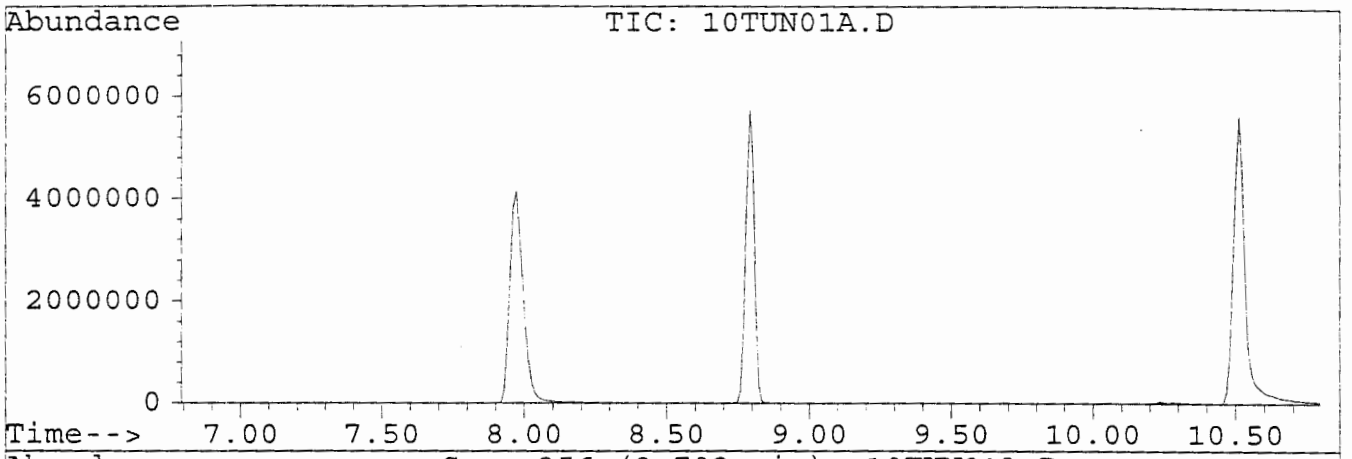
10TUN01A.D 8270-39F.M Mon Oct 12 12:19:26 1998

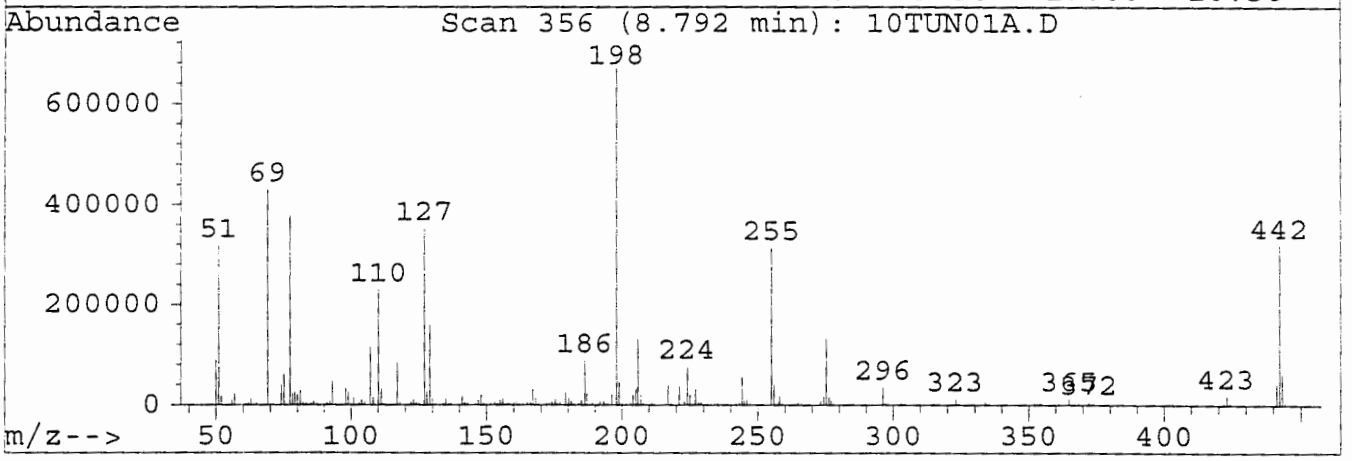
DFTPP Ion abundance criteria

Data File : C:\HPCHEM\1\DATA\E01OCT98\10TUN01A.D
Acq On : 1 Oct 98 8:27 am
Sample : DFTPP Tune Ck S2,16,1
Misc :

Vial: 1
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625





Peak Apex is scan: 356

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	46.1	318208	PASS
68	69	0	2	0.0	0	PASS
70	69	0	2	0.4	1687	PASS
127	198	40	60	51.1	352704	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	690496	PASS
199	198	5	9	6.6	45512	PASS
275	198	10	30	18.8	130120	PASS
365	198	1	100	1.9	13079	PASS
441	443	0	100	67.4	42408	PASS
442	198	40	100	46.2	319104	PASS
443	442	17	23	19.7	62888	PASS

M 10-1-98

10TUN01A.D 8270-72.M Thu Oct 01 16:26:23 1998

Response Factor Report HP 5971 -

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Initial Calibration

Calibration Files
5 =ICAL5.D 20 =ICAL20.D 50 =ICAL50.D
80 =ICAL80.D 100 =ICAL100.D 120 =ICAL120.D

		Compound	5	20	50	80	100	120	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------	----------	----------	ISTD	----------	----------	----------	
2)		Pyridine	1.025	1.333	1.360	1.153	1.180	1.206	1.209	10.19
3)		N-Nitrosodimethylam	0.920	0.959	0.953	0.934	0.918	0.898	0.930	2.51
4)	S	2-Fluorophenol (s.	1.519	1.653	1.558	1.708	1.597	1.608	1.607	4.19
5)		Aniline	1.906	1.799	1.586	1.833	1.792	1.714	1.772	6.21
6)	S	Phenol-d5 (s.s)	1.796	1.898	1.694	1.809	1.662	1.658	1.753	5.51
7)	MC	Phenol	2.212	2.190	1.907	1.929	1.866	1.823	1.988	8.51✓
8)		bis(2-Chloroethyl)e	1.026	1.108	1.220	1.270	1.155	1.145	1.154	7.40
9)	M	2-Chlorophenol	1.407	1.451	1.403	1.427	1.400	1.390	1.413	1.58
10)		1,3-Dichlorobenzene	1.394	1.412	1.350	1.334	1.292	1.283	1.344	3.89
11)	MC	1,4-Dichlorobenzene	1.567	1.547	1.482	1.476	1.448	1.478	1.500	3.10✓
12)		1,2-Dichlorobenzene	1.428	1.411	1.301	1.289	1.252	1.257	1.323	5.85
13)		Benzyl alcohol	1.021	1.082	1.053	1.063	1.046	1.048	1.052	1.91
14)		2-Methylphenol	1.491	1.521	1.444	1.428	1.384	1.364	1.439	4.19
15)		bis(2-Chloroisoprop	2.325	2.259	2.070	2.000	1.914	1.889	2.076	8.68
16)	MP	n-Nitroso-di-n-prop	1.281	1.249	1.142	1.157	1.138	1.101	1.178✓	5.99
)		Hexachloroethane	0.685	0.659	0.636	0.651	0.646	0.647	0.654	2.56
18)		3&4-Methylphenol	3.125	2.990	2.730	2.685	2.653	2.643	2.804	7.24
19)		Benzoic acid		0.747	0.890	0.936	0.929	0.954	0.891	9.45
20)	I	Naphthalene-d8	----------	----------	----------	ISTD	----------	----------	----------	
21)	S	Nitrobenzene-d5 (s.	0.479	0.503	0.456	0.495	0.455	0.453	0.473	4.65
22)		Nitrobenzene	0.503	0.510	0.464	0.455	0.437	0.434	0.467	6.98
23)		Isophorone	0.981	1.012	0.920	0.911	0.897	0.913	0.939	4.93
24)	C	2-Nitrophenol	0.238	0.279	0.248	0.244	0.220	0.237	0.244	7.98✓
25)		2,4-Dimethylphenol	0.468	0.493	0.456	0.447	0.439	0.438	0.457	4.59
26)		bis(2-Chloroethoxy)	0.569	0.570	0.520	0.493	0.480	0.478	0.519	8.18
27)	C	2,4-Dichlorophenol	0.321	0.342	0.310	0.302	0.288	0.288	0.309	6.80✓
28)	M	1,2,4-Trichlorobenz	0.333	0.328	0.293	0.288	0.275	0.277	0.299	8.46
29)		Naphthalene	1.144	1.109	0.975	0.944	0.900	0.887	0.993	10.93
30)		4-Chloroaniline	0.392	0.344	0.338	0.374	0.367	0.363	0.363	5.47
31)	C	Hexachlorobutadiene	0.176	0.172	0.156	0.151	0.145	0.144	0.157	8.85✓
32)	MC	4-Chloro-3-methylph	0.390	0.430	0.407	0.392	0.374	0.368	0.393	5.81✓
33)		2-Methylnaphthalene	0.762	0.729	0.649	0.632	0.609	0.606	0.664	9.85
34)		1-Methylnaphthalene	0.705	0.691	0.621	0.598	0.584	0.578	0.630	8.75
35)	I	Acenaphthene-d10	----------	----------	----------	ISTD	----------	----------	----------	
36)	P	Hexachlorocyclopent	0.110	0.184	0.214	0.216	0.213	0.213	0.192✓	21.77
37)	C	2,4,6-Trichlorophen	0.270	0.284	0.269	0.255	0.246	0.247	0.262	5.69✓
38)		2,4,5-Trichlorophen	0.265	0.299	0.292	0.271	0.254	0.260	0.274	6.67
39)	S	2-Fluorobiphenyl (s	1.315	1.274	1.064	1.141	1.030	1.043	1.144	10.76
)		2-Chloronaphthalene	1.191	1.135	1.015	0.961	0.925	0.906	1.022	11.41

(#) = Out of Range

Response Factor Report HP 5971 -

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Initial Calibration

Calibration Files
5 =ICAL5.D 20 =ICAL20.D 50 =ICAL50.D
80 =ICAL80.D 100 =ICAL100.D 120 =ICAL120.D

		Compound	5	20	50	80	100	120	Avg	%RSD
41)		2-Nitroaniline	0.409	0.461	0.457	0.446	0.428	0.422	0.437	4.76
42)		Dimethylphthalate	1.491	1.438	1.264	1.203	1.144	1.148	1.281	11.65
43)		Acenaphthylene	1.854	1.764	1.502	1.383	1.295	1.288	1.514	16.02
44)		2,6-Dinitrotoluene	0.299	0.344	0.338	0.323	0.313	0.315	0.322	5.18
45)		3-Nitroaniline	0.272	0.199	0.127	0.171	0.204	0.211	0.197	24.26
46)	MC	Acenaphthene	1.130	1.074	0.956	0.896	0.859	0.843	0.960	12.34✓
47)	P	2,4-Dinitrophenol		0.112	0.154	0.174	0.178	0.181	0.160✓	18.14
48)	MP	4-Nitrophenol	0.153	0.193	0.214	0.213	0.213	0.213	0.200✓	12.26
49)		Dibenzofuran	1.724	1.639	1.482	1.407	1.348	1.340	1.490	10.69
50)	M	2,4-Dinitrotoluene	0.415	0.462	0.453	0.444	0.432	0.423	0.438	4.11
51)		Diethylphthalate	1.512	1.453	1.232	1.131	1.065	1.078	1.245	15.57
52)		Fluorene	1.371	1.352	1.228	1.159	1.121	1.110	1.223	9.37
53)		4-Chlorophenyl-phen	0.497	0.471	0.406	0.389	0.379	0.384	0.421	11.93
54)		4-Nitroaniline	0.249	0.245	0.185	0.195	0.200	0.202	0.213	12.90
55)	I	Phenanthrene-d10	----------ISTD----------							
56)		4,6-Dinitro-2-methy	0.084	0.122	0.139	0.136	0.126	0.122	0.122	16.15
)	C	n-Nitrosodiphenylam	0.688	0.654	0.485	0.420	0.396	0.391	0.506	26.27✓
)		1,2-Diphenylhydrazi	2.430	2.185	1.879	1.703	1.585	1.549	1.889	18.68
59)	S	2,4,6-Tribromopheno	0.071	0.077	0.072	0.074	0.070	0.070	0.072	3.98
60)		4-Bromophenyl-pheny	0.186	0.185	0.163	0.154	0.147	0.147	0.164	10.94
61)		Hexachlorobenzene	0.177	0.174	0.156	0.147	0.141	0.141	0.156	10.35
62)	MC	Pentachlorophenol	0.076	0.102	0.105	0.105	0.103	0.103	0.099	11.43✓
63)		Phenanthrene	1.243	1.184	1.031	0.972	0.947	0.925	1.050	12.62
64)		Anthracene	1.184	1.172	1.017	0.951	0.902	0.897	1.021	12.69
65)		Carbazole		0.741	0.455	0.479	0.548	0.569	0.558	20.09
66)		Di-n-butylphthalate	1.849	1.784	1.513	1.402	1.337	1.321	1.534	14.98
67)	C	Fluoranthene	1.109	1.079	0.944	0.885	0.857	0.851	0.954	11.91✓
68)	I	Chyrsene-d12	----------ISTD----------							
69)		Benzidine		0.082	0.066	0.106	0.139	0.114	0.102	27.94
70)	M	Pyrene	1.568	1.473	1.333	1.269	1.228	1.227	1.350	10.45
71)	S	Terphenyl-d14 (s.s)	0.991	0.954	0.821	0.874	0.817	0.835	0.882	8.36
72)		Butylbenzylphthalat	1.068	1.105	1.004	0.957	0.925	0.926	0.997	7.57
73)		Benzo[a]anthracene	1.339	1.339	1.237	1.194	1.158	1.164	1.238	6.67
74)		3,3'-Dichlorobenzid	0.323	0.257	0.232	0.250	0.273	0.294	0.272	12.09
75)		Chrysene	1.250	1.178	1.057	1.028	1.004	1.016	1.089	9.28
76)		bis(2-Ethylhexyl)ph	1.452	1.434	1.266	1.183	1.144	1.152	1.272	10.96
77)	I	Perylene-d12	----------ISTD----------							
78)	C	Di-n-octylphthalate	3.597	3.609	3.104	2.933	2.765	2.810	3.136	12.12✓
79)		Benzo[b]fluoranthen	1.557	1.612	1.521	1.638	1.694	1.401	1.570	6.55
)		Benzo[k]fluoranthen	1.598	1.445	1.246	1.098	0.917	0.886	1.199	23.88

(#) = Out of Range

Response Factor Report HP 5971 -

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Initial Calibration

Calibration Files

5	=ICAL5.D	20	=ICAL20.D	50	=ICAL50.D
80	=ICAL80.D	100	=ICAL100.D	120	=ICAL120.D

		Compound	5	20	50	80	100	120	Avg	%RSD
81)	C	Benzo[a]pyrene	1.373	1.348	1.247	1.236	1.196	1.191	1.265	6.12✓
82)		Indeno[1,2,3-cd]pyr	1.163	1.233	1.165	1.158	1.115	1.098	1.155	4.06
83)		Dibenz[a,h]anthrace	0.921	0.972	0.912	0.891	0.848	0.841	0.898	5.46
84)		Benzo[g,h,i]perylen	0.983	1.038	0.962	0.962	0.927	0.915	0.964	4.54

(#) = Out of Range

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL5.D Vial: 4
Acq On : 7 Aug 98 11:46 am Operator: TMJ
Sample : 8270 Initial Calibration 5 µg/ml S2,11,2 Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 14:12 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.37	152	1571536	40.00 ppb	-0.10
20) Naphthalene-d8	11.77	136	5421378	40.00 ppb	-0.11
35) Acenaphthene-d10	16.91	164	3348770	40.00 ppb	-0.11
55) Phenanthrene-d10	21.21	188	4575786	40.00 ppb	-0.12
68) Chyrsene-d12	29.07	240	3428838	40.00 ppb	-0.12
77) Perylene-d12	32.75	264	2220793	40.00 ppb	-0.10

System Monitoring Compounds					%Recovery
4) 2-Fluorophenol (s.s.)	5.64	112	1193252	17.67 ppb	8.83%
6) Phenol-d5 (s.s)	7.75	99	1411519	18.99 ppb	9.49%
21) Nitrobenzene-d5 (s.s)	9.90	82	648708	9.27 ppb	9.27%
39) 2-Fluorobiphenyl (s.s)	15.00	172	1101274	10.96 ppb	10.96%
59) 2,4,6-Tribromophenol (s.s)	19.26	330	161693	19.06 ppb	9.53%
71) Terphenyl-d14 (s.s)	26.06	244	849285	11.42 ppb	11.42%

M 8-10-98

Target Compounds						Qvalue
2) Pyridine	3.56	79	201393	4.17 ppb	m✓	96
3) N-Nitrosodimethylamine	3.53	74	180653	4.36 ppb		88
5) Aniline	7.72	93	374409	4.96 ppb	#	1
7) Phenol	7.78	94	434546	5.31 ppb	#	77
8) bis(2-Chloroethyl)ether	7.88	63	201520	3.67 ppb		95
9) 2-Chlorophenol	7.96	128	276299	4.78 ppb		98
10) 1,3-Dichlorobenzene	8.27	146	273801	4.76 ppb	#	91
11) 1,4-Dichlorobenzene	8.40	146	307898	5.13 ppb	#	90
12) 1,2-Dichlorobenzene	8.87	146	280562	5.14 ppb		95
13) Benzyl alcohol	8.86	108	200562	4.73 ppb		93
14) 2-Methylphenol	9.24	108	292848	4.59 ppb		85
15) bis(2-Chloroisopropyl) eth	9.24	45	456701	4.79 ppb	#	45
16) n-Nitroso-di-n-propylamine	9.61	70	251645	4.71 ppb	#	87
17) Hexachloroethane	9.64	117	134535	4.89 ppb		96
18) 3&4-Methylphenol	9.66	108	613930	10.08 ppb		93
19) Benzoic acid	11.44	122	74732	2.16 ppb		87
22) Nitrobenzene	9.95	77	340933	5.02 ppb		97
23) Isophorone	10.59	82	664768	4.97 ppb		99
24) 2-Nitrophenol	10.82	139	161122	5.17 ppb	m✓	89
25) 2,4-Dimethylphenol	11.05	107	317228	4.67 ppb		100
26) bis(2-Chloroethoxy)methane	11.29	93	385749	5.43 ppb		96
27) 2,4-Dichlorophenol	11.50	162	217773	5.07 ppb		95
28) 1,2,4-Trichlorobenzene	11.68	180	225360	5.62 ppb		96
29) Naphthalene	11.82	128	775164	5.71 ppb		98
30) 4-Chloroaniline	12.15	127	265417	4.68 ppb		98
31) Hexachlorobutadiene	12.38	225	119594	5.34 ppb		98
32) 4-Chloro-3-methylphenol	13.66	107	264277	4.63 ppb	#	39

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL5.D Vial: 4
Acq On : 7 Aug 98 11:46 am Operator: TMJ
Sample : 8270 Initial Calibration 5 µg/ml S2,11,2 Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 14:12 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration

JM 8-10-98

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
33)	2-Methylnaphthalene	13.80	142	516080	5.73	ppb		93
34)	1-Methylnaphthalene	14.11	142	477589	5.53	ppb		92
36)	Hexachlorocyclopentadiene	14.49	237	46137	1.92	ppb		100
37)	2,4,6-Trichlorophenol	14.79	196	113001	5.14	ppb		97
38)	2,4,5-Trichlorophenol	14.92	196	110988	4.70	ppb		99
40)	2-Chloronaphthalene	15.20	162	498471	5.60	ppb		93
41)	2-Nitroaniline	15.71	65	171067	4.22	ppb		93
42)	Dimethylphthalate	16.40	163	624086	5.46	ppb		99
43)	Acenaphthylene	16.42	152	776190	5.88	ppb		98
44)	2,6-Dinitrotoluene	16.58	165	125159	4.67	ppb		98
45)	3-Nitroaniline	16.96	138	113939	5.16	ppb	#	82
46)	Acenaphthene	16.98	153	473003	5.83	ppb		94
47)	2,4-Dinitrophenol	17.29	184	14693	1.12	ppb	#	47
48)	4-Nitrophenol	17.71	109	63860	3.06	ppb	m	23
49)	Dibenzofuran	17.45	168	721741	5.67	ppb		89
50)	2,4-Dinitrotoluene	17.71	165	173603	4.53	ppb	#	86
51)	Diethylphthalate	18.50	149	632918	5.81	ppb		98
52)	Fluorene	18.46	166	573781	5.46	ppb		92
53)	4-Chlorophenyl-phenylether	18.55	204	207894	5.79	ppb	#	85
54)	4-Nitroaniline	18.78	138	104268	4.60	ppb	#	79
56)	4,6-Dinitro-2-methylphenol	18.88	198	48211	3.18	ppb	#	14
57)	n-Nitrosodiphenylamine	18.95	169	393787	6.00	ppb		96
58)	1,2-Diphenylhydrazine	19.00	77	1389611	5.92	ppb		95
60)	4-Bromophenyl-phenylether	19.97	248	106222	5.64	ppb		90
61)	Hexachlorobenzene	20.32	284	101282	5.60	ppb		89
62)	Pentachlorophenol	20.94	266	43618	3.54	ppb	m	96
63)	Phenanthrene	21.26	178	710924	5.80	ppb		98
64)	Anthracene	21.39	178	677492	5.76	ppb		98
65)	Carbazole	21.98	167	687947	6.80	ppb		98
66)	Di-n-butylphthalate	23.33	149	1057730	6.02	ppb	#	96
67)	Fluoranthene	24.77	202	634183	5.85	ppb		95
69)	Benzidine	25.37	184	96322	3.31	ppb	m	100
70)	Pyrene	25.41	202	671997	6.00	ppb		96
72)	Butylbenzylphthalate	27.73	149	457610	5.44	ppb		95
73)	Benzo[a]anthracene	28.99	228	573688	5.55	ppb		99
74)	3,3'-Dichlorobenzidine	29.12	252	138648	6.73	ppb	#	95
75)	Chrysene	29.13	228	535879	5.83	ppb		98
76)	bis(2-Ethylhexyl)phthalate	29.57	149	622271	5.93	ppb		97
78)	Di-n-octylphthalate	31.27	149	998422	7.61	ppb		96
79)	Benzo[b]fluoranthene	31.92	252	432277	5.88	ppb	m	97
80)	Benzo[k]fluoranthene	31.97	252	443713	8.05	ppb		94
81)	Benzo[a]pyrene	32.60	252	381067	6.39	ppb	#	96
82)	Indeno[1,2,3-cd]pyrene	34.99	276	322914	5.67	ppb		94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL5.D Vial: 4
Acq On : 7 Aug 98 11:46 am Operator: TMJ
Sample : 8270 Initial Calibration 5 µg/ml S2,11,2 Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 14:12 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration

JM 8-10-98

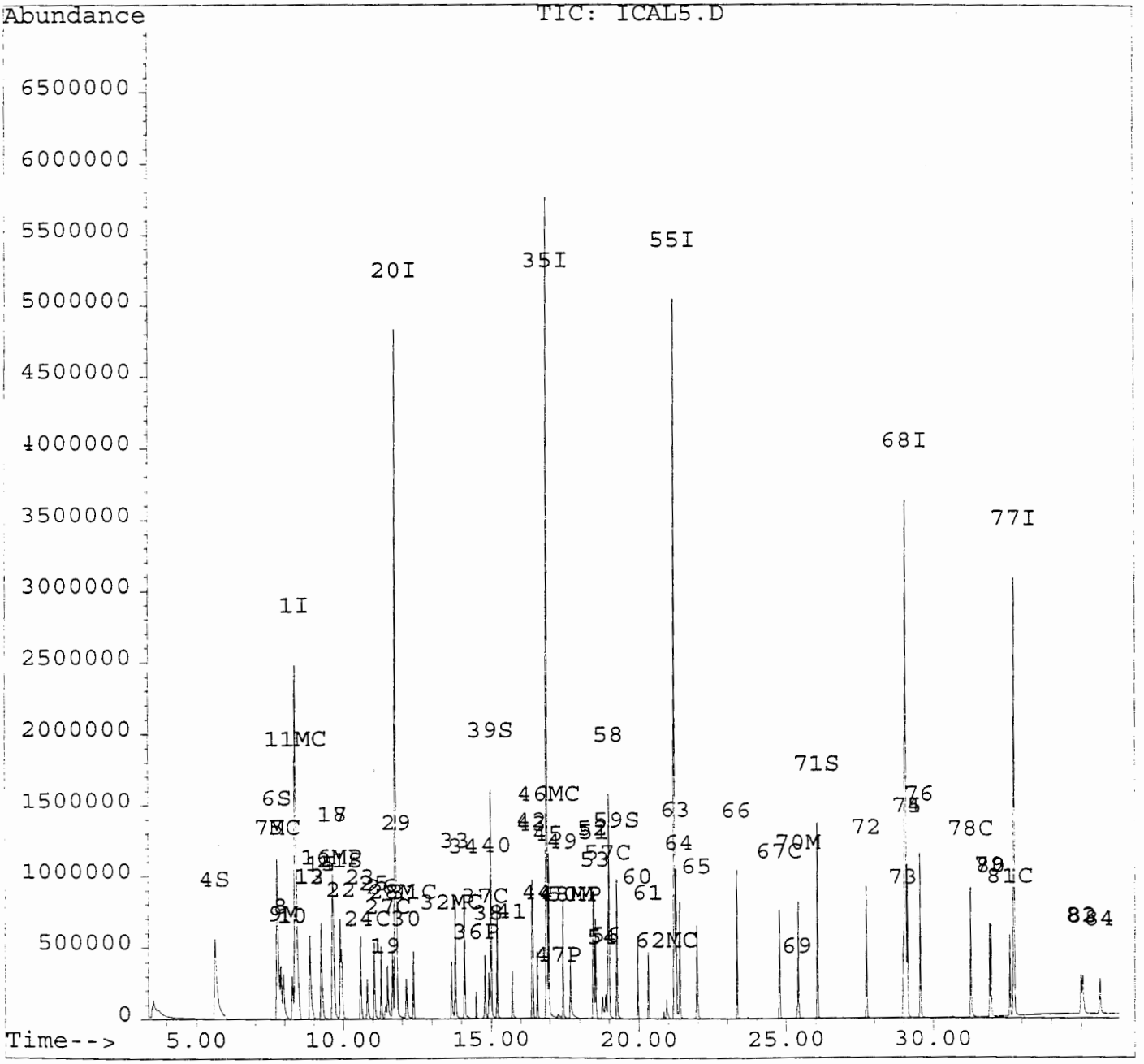
Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
83) Dibenz[a,h]anthracene	35.05	278	255558	5.21	ppb	#	92
84) Benzo[g,h,i]perylene	35.62	276	272845	4.88	ppb		94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL5.D Vial: 4
Acq On : 7 Aug 98 11:46 am Operator: TMJ
Sample : 8270 Initial Calibration 5 µg/ml S2,11,2 Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 14:12 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL20.D Vial: 5
Acq On : 7 Aug 98 12:29 pm Operator: TMJ
Sample : 8270 Initial Calibration 20 µg/ml S2,11, Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 16:16 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.37	152	1539244	40.00	ppb	-0.10
20) Naphthalene-d8	11.77	136	5272649	40.00	ppb	-0.11
35) Acenaphthene-d10	16.90	164	3288404	40.00	ppb	-0.11
55) Phenanthrene-d10	21.22	188	4491231	40.00	ppb	-0.11
68) Chyrsene-d12	29.07	240	3343345	40.00	ppb	-0.12
77) Perylene-d12	32.75	264	2229204	40.00	ppb	-0.10

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol (s.s.)	5.64	112	3180125	48.07	ppb	24.04%
6) Phenol-d5 (s.s)	7.75	99	3651293	50.14	ppb	25.07%
21) Nitrobenzene-d5 (s.s)	9.90	82	1656208	24.32	ppb	24.32%
39) 2-Fluorobiphenyl (s.s)	15.00	172	2617689	26.54	ppb	26.54%
59) 2,4,6-Tribromophenol (s.s)	19.28	330	433187	52.02	ppb	26.01%
71) Terphenyl-d14 (s.s)	26.08	244	1992609	27.47	ppb	27.47%

JM 8-10-98

Target Compounds							Qvalue
2) Pyridine	3.50	79	1026268	21.71	ppb	m	0
3) N-Nitrosodimethylamine	3.52	74	738357	18.21	ppb		86
5) Aniline	7.71	93	1384174	18.73	ppb	#	1
7) Phenol	7.78	94	1685207	21.03	ppb	#	93
8) bis(2-Chloroethyl)ether	7.88	63	852400	15.83	ppb	m	98
9) 2-Chlorophenol	7.96	128	1116666	19.74	ppb		96
10) 1,3-Dichlorobenzene	8.27	146	1086798	19.30	ppb		97
11) 1,4-Dichlorobenzene	8.40	146	1190276	20.23	ppb		96
12) 1,2-Dichlorobenzene	8.87	146	1086041	20.32	ppb		95
13) Benzyl alcohol	8.86	108	832531	20.05	ppb		94
14) 2-Methylphenol	9.25	108	1170381	18.73	ppb		88
15) bis(2-Chloroisopropyl) eth	9.24	45	1738302	18.62	ppb	#	44
16) n-Nitroso-di-n-propylamine	9.63	70	960928	18.36	ppb	#	92
17) Hexachloroethane	9.63	117	507151	18.83	ppb		95
18) 3&4-Methylphenol	9.66	108	2301393	38.57	ppb		94
19) Benzoic acid	11.58	122	574625	16.93	ppb		96
22) Nitrobenzene	9.95	77	1344540	20.37	ppb		96
23) Isophorone	10.59	82	2668694	20.53	ppb		99
24) 2-Nitrophenol	10.82	139	734407	24.23	ppb	m	91
25) 2,4-Dimethylphenol	11.06	107	1299172	19.68	ppb		99
26) bis(2-Chloroethoxy)methane	11.30	93	1503448	21.78	ppb		97
27) 2,4-Dichlorophenol	11.50	162	901606	21.57	ppb		97
28) 1,2,4-Trichlorobenzene	11.68	180	865834	22.22	ppb		96
29) Naphthalene	11.83	128	2924238	22.15	ppb		99
30) 4-Chloroaniline	12.14	127	906938	16.43	ppb		100
31) Hexachlorobutadiene	12.38	225	454007	20.86	ppb		99
32) 4-Chloro-3-methylphenol	13.66	107	1134075	20.41	ppb	#	39

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL20.D Vial: 5
Acq On : 7 Aug 98 12:29 pm Operator: TMJ
Sample : 8270 Initial Calibration 20 µg/ml S2,11, Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 16:16 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration

JM 8-10-98

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	2-Methylnaphthalene	13.81	142	1922524	21.97 ppb		95
34)	1-Methylnaphthalene	14.11	142	1821774	21.68 ppb		95
36)	Hexachlorocyclopentadiene	14.49	237	301874	12.81 ppb		99
37)	2,4,6-Trichlorophenol	14.79	196	466528	21.59 ppb		98
38)	2,4,5-Trichlorophenol	14.91	196	492239	21.24 ppb		99
40)	2-Chloronaphthalene	15.21	162	1865851	21.34 ppb		95
41)	2-Nitroaniline	15.72	65	758774	19.06 ppb		92
42)	Dimethylphthalate	16.41	163	2364667	21.06 ppb		99
43)	Acenaphthylene	16.43	152	2900526	22.39 ppb		99
44)	2,6-Dinitrotoluene	16.60	165	565647	21.47 ppb		91
45)	3-Nitroaniline	16.97	138	326927	15.09 ppb	#	87
46)	Acenaphthene	16.99	153	1766500	22.19 ppb		96
47)	2,4-Dinitrophenol	17.27	184	183355	14.20 ppb	#	39
48)	4-Nitrophenol	17.67	109	317493	15.51 ppb	#	44
49)	Dibenzofuran	17.46	168	2695269	21.57 ppb		91
50)	2,4-Dinitrotoluene	17.71	165	760123	20.21 ppb	#	85
51)	Diethylphthalate	18.52	149	2388959	22.33 ppb		100
52)	Fluorene	18.47	166	2223130	21.56 ppb		95
53)	4-Chlorophenyl-phenylether	18.56	204	774759	21.98 ppb		87
54)	4-Nitroaniline	18.81	138	403124	18.12 ppb	#	69
56)	4,6-Dinitro-2-methylphenol	18.90	198	273874	18.38 ppb	#	14
57)	n-Nitrosodiphenylamine	18.97	169	1469441	22.83 ppb		97
58)	1,2-Diphenylhydrazine	19.02	77	4907491	21.31 ppb		97
60)	4-Bromophenyl-phenylether	19.98	248	415342	22.45 ppb		91
61)	Hexachlorobenzene	20.34	284	390682	22.02 ppb		89
62)	Pentachlorophenol	20.94	266	229733	18.99 ppb		97
63)	Phenanthrene	21.27	178	2658896	22.12 ppb		98
64)	Anthracene	21.40	178	2631675	22.80 ppb		98
65)	Carbazole	21.98	167	1663541	16.76 ppb	m✓	97
66)	Di-n-butylphthalate	23.35	149	4006159	23.24 ppb	#	97
67)	Fluoranthene	24.79	202	2423763	22.79 ppb		95
69)	Benzidine	25.37	184	137709	4.85 ppb	m✓	96
70)	Pyrene	25.43	202	2463155	22.55 ppb		96
72)	Butylbenzylphthalate	27.74	149	1846407	22.51 ppb		94
73)	Benzo[a]anthracene	29.01	228	2237539	22.18 ppb		99
74)	3,3'-Dichlorobenzidine	29.12	252	430125	21.42 ppb		98
75)	Chrysene	29.14	228	1968668	21.95 ppb		99
76)	bis(2-Ethylhexyl)phthalate	29.57	149	2397916	23.43 ppb		99
78)	Di-n-octylphthalate	31.27	149	4023113	30.54 ppb		98
79)	Benzo[b]fluoranthene	31.94	252	1796922	24.35 ppb	#	59
80)	Benzo[k]fluoranthene	31.99	252	1611144	29.13 ppb		97
1)	Benzo[a]pyrene	32.61	252	1502555	25.10 ppb	#	96
2)	Indeno[1,2,3-cd]pyrene	35.01	276	1373950	24.04 ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL20.D Vial: 5
Acq On : 7 Aug 98 12:29 pm Operator: TMJ
Sample : 8270 Initial Calibration 20 µg/ml S2,11, Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 16:16 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration

JM 8-10-98

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
83) Dibenz[a,h]anthracene	35.07	278	1083863	22.00 ppb	96
84) Benzo[g,h,i]perylene	35.64	276	1156953	20.60 ppb	95

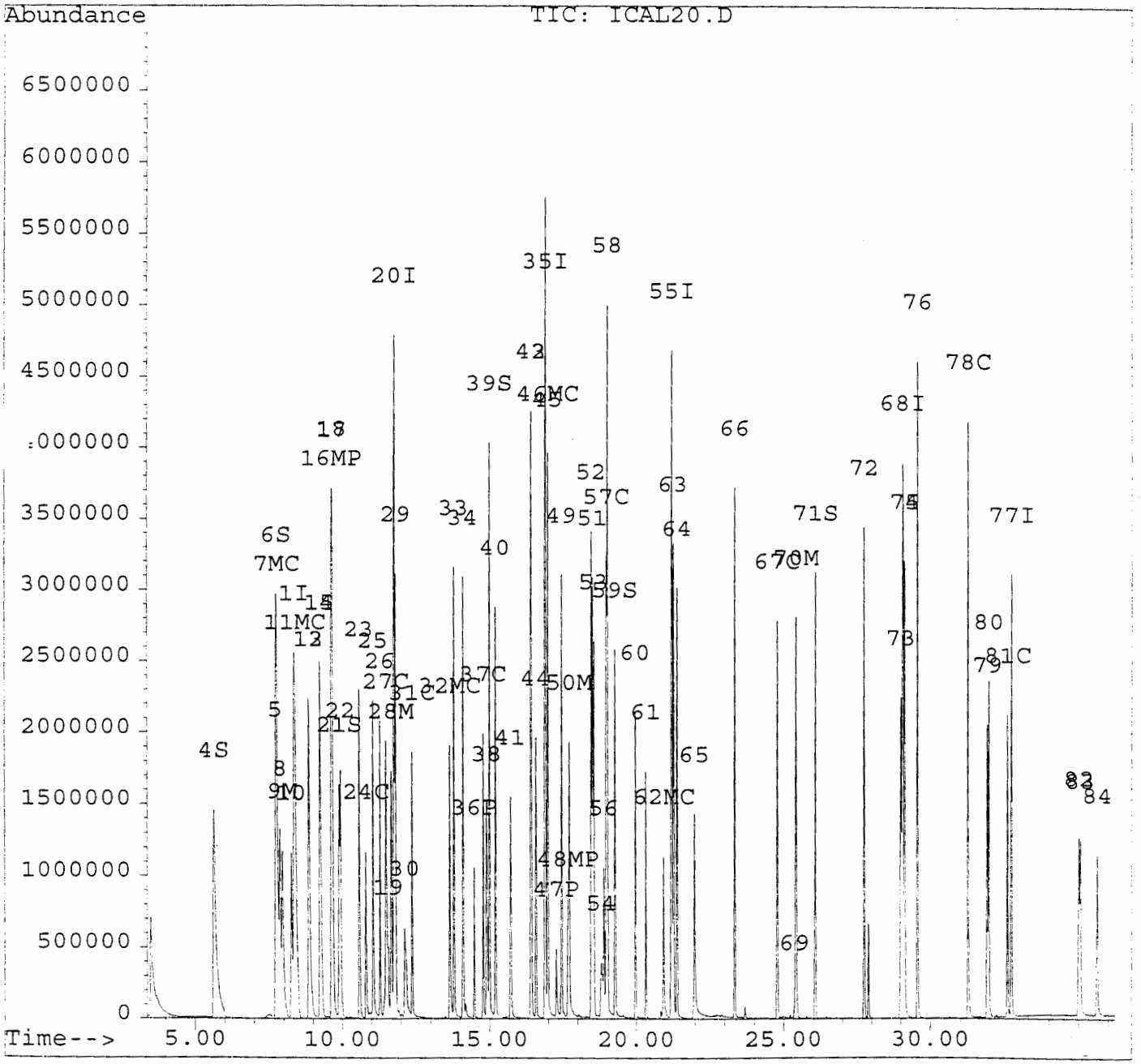
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL20.D
Acq On : 7 Aug 98 12:29 pm
Sample : 8270 Initial Calibration 20 µg/ml S2,11,
Misc : IS:S2,10,7
Quant Time: Aug 7 16:16 1998

Vial: 5
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL50.D Vial: 6
Acq On : 7 Aug 98 1:14 pm Operator: TMJ
Sample : 8270 Initial Calibration 50 µg/ml S2,11, Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 14:19 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.37	152	1558958	40.00	ppb		-0.10
20) Naphthalene-d8	11.79	136	5497953	40.00	ppb		-0.09
35) Acenaphthene-d10	16.91	164	3407844	40.00	ppb		-0.10
55) Phenanthrene-d10	21.22	188	4766609	40.00	ppb		-0.10
68) Chyrsene-d12	29.10	240	3447640	40.00	ppb		-0.10
77) Perylene-d12	32.77	264	2395825	40.00	ppb		-0.08

System Monitoring Compounds							%Recovery
4) 2-Fluorophenol (s.s.)	5.64	112	12146404	181.29	ppb		90.65%
6) Phenol-d5 (s.s)	7.80	99	13206241	179.06	ppb		89.53%
21) Nitrobenzene-d5 (s.s)	9.93	82	6267843	88.28	ppb		88.28%
39) 2-Fluorobiphenyl (s.s)	15.03	172	9060792	88.65	ppb		88.65%
59) 2,4,6-Tribromophenol (s.s)	19.33	330	1707110	193.18	ppb		96.59%
71) Terphenyl-d14 (s.s)	26.12	244	7077308	94.63	ppb		94.63%

arget Compounds							Qvalue
2) Pyridine	3.48	79	2649721	55.35	ppb	m	0
3) N-Nitrosodimethylamine	3.51	74	1857811	45.23	ppb		84
5) Aniline	7.72	93	3091335	41.30	ppb	#	29
7) Phenol	7.82	94	3715414	45.78	ppb	#	70
8) bis(2-Chloroethyl)ether	7.92	63	2378364	43.61	ppb		87
9) 2-Chlorophenol	7.97	128	2734990	47.74	ppb		98
10) 1,3-Dichlorobenzene	8.27	146	2631125	46.13	ppb		99
11) 1,4-Dichlorobenzene	8.41	146	2887675	48.47	ppb		98
12) 1,2-Dichlorobenzene	8.87	146	2535029	46.84	ppb		97
13) Benzyl alcohol	8.88	108	2051090	48.78	ppb		96
14) 2-Methylphenol	9.26	108	2813240	44.45	ppb		90
15) bis(2-Chloroisopropyl) eth	9.25	45	4033841	42.66	ppb	#	40
16) n-Nitroso-di-n-propylamine	9.66	70	2224841	41.96	ppb	m	91
17) Hexachloroethane	9.64	117	1240142	45.47	ppb		95
18) 3&4-Methylphenol	9.70	108	5320657	88.05	ppb		97
19) Benzoic acid	11.74	122	1733835	50.44	ppb	m	0
22) Nitrobenzene	9.98	77	3187832	46.32	ppb		95
23) Isophorone	10.63	82	6325212	46.67	ppb		100
24) 2-Nitrophenol	10.84	139	1706876	54.01	ppb	m	91
25) 2,4-Dimethylphenol	11.08	107	3135888	45.55	ppb		99
26) bis(2-Chloroethoxy)methane	11.32	93	3574129	49.66	ppb		98
27) 2,4-Dichlorophenol	11.52	162	2132386	48.94	ppb		98
28) 1,2,4-Trichlorobenzene	11.69	180	2013794	49.56	ppb		98
29) Naphthalene	11.84	128	6703147	48.70	ppb		99
30) 4-Chloroaniline	12.15	127	2319470	40.29	ppb	m	99
31) Hexachlorobutadiene	12.39	225	1075515	47.38	ppb		99
32) 4-Chloro-3-methylphenol	13.68	107	2798474	48.30	ppb	#	39

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL50.D Vial: 6
Acq On : 7 Aug 98 1:14 pm Operator: TMJ
Sample : 8270 Initial Calibration 50 µg/ml S2,11, Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 14:19 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration

M 8-10-98

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
33)	2-Methylnaphthalene	13.83	142	4457300	48.84	ppb		97
34)	1-Methylnaphthalene	14.13	142	4266101	48.69	ppb		98
36)	Hexachlorocyclopentadiene	14.50	237	913320	37.39	ppb		99
37)	2,4,6-Trichlorophenol	14.81	196	1143998	51.09	ppb		98
38)	2,4,5-Trichlorophenol	14.93	196	1245499	51.86	ppb		97
40)	2-Chloronaphthalene	15.24	162	4325097	47.73	ppb		96
41)	2-Nitroaniline	15.76	65	1946124	47.16	ppb		91
42)	Dimethylphthalate	16.44	163	5383549	46.27	ppb		100
43)	Acenaphthylene	16.45	152	6397201	47.65	ppb		99
44)	2,6-Dinitrotoluene	16.62	165	1437979	52.67	ppb		96
45)	3-Nitroaniline	17.03	138	541833	24.13	ppb	#	88
46)	Acenaphthene	17.01	153	4071072	49.34	ppb		98
47)	2,4-Dinitrophenol	17.29	184	656890	49.11	ppb		87
48)	4-Nitrophenol	17.70	109	911025	42.94	ppb	#	48
49)	Dibenzofuran	17.48	168	6312824	48.76	ppb		92
50)	2,4-Dinitrotoluene	17.75	165	1928547	49.47	ppb	#	81
51)	Diethylphthalate	18.56	149	5247808	47.33	ppb		99
52)	Fluorene	18.49	166	5229915	48.94	ppb		97
53)	4-Chlorophenyl-phenylether	18.58	204	1731288	47.39	ppb		87
54)	4-Nitroaniline	18.86	138	787008	34.14	ppb	#	28
56)	4,6-Dinitro-2-methylphenol	18.96	198	828805	52.41	ppb	#	14
57)	n-Nitrosodiphenylamine	19.02	169	2888136	42.27	ppb		94
58)	1,2-Diphenylhydrazine	19.05	77	11197192	45.81	ppb		96
60)	4-Bromophenyl-phenylether	20.00	248	969080	49.36	ppb		93
61)	Hexachlorobenzene	20.36	284	929682	49.37	ppb		90
62)	Pentachlorophenol	20.96	266	627583	48.89	ppb		98
63)	Phenanthrene	21.30	178	6143870	48.15	ppb		99
64)	Anthracene	21.43	178	6058637	49.47	ppb		99
65)	Carbazole	21.99	167	2713619	25.76	ppb	#	96
66)	Di-n-butylphthalate	23.37	149	9013269	49.27	ppb		98
67)	Fluoranthene	24.82	202	5622081	49.82	ppb		96
69)	Benzidine	25.38	184	284855	9.72	ppb	m✓	98
70)	Pyrene	25.46	202	5746526	51.03	ppb		98
72)	Butylbenzylphthalate	27.76	149	4325179	51.15	ppb		93
73)	Benzo[a]anthracene	29.03	228	5332782	51.27	ppb		99
74)	3,3'-Dichlorobenzidine	29.14	252	1000415	48.31	ppb		98
75)	Chrysene	29.18	228	4557320	49.28	ppb		99
76)	bis(2-Ethylhexyl)phthalate	29.58	149	5454808	51.70	ppb		100
78)	Di-n-octylphthalate	31.29	149	9297187	65.66	ppb		99
79)	Benzo[b]fluoranthene	31.97	252	4554788	57.43	ppb		98
80)	Benzo[k]fluoranthene	32.03	252	3732498	62.79	ppb		98
81)	Benzo[a]pyrene	32.64	252	3734815	58.05	ppb		97
82)	Indeno[1,2,3-cd]pyrene	35.06	276	3489328	56.81	ppb		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL50.D Vial: 6
Acq On : 7 Aug 98 1:14 pm Operator: TMJ
Sample : 8270 Initial Calibration 50 µg/ml S2,11, Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 14:19 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration

M 8-10-98

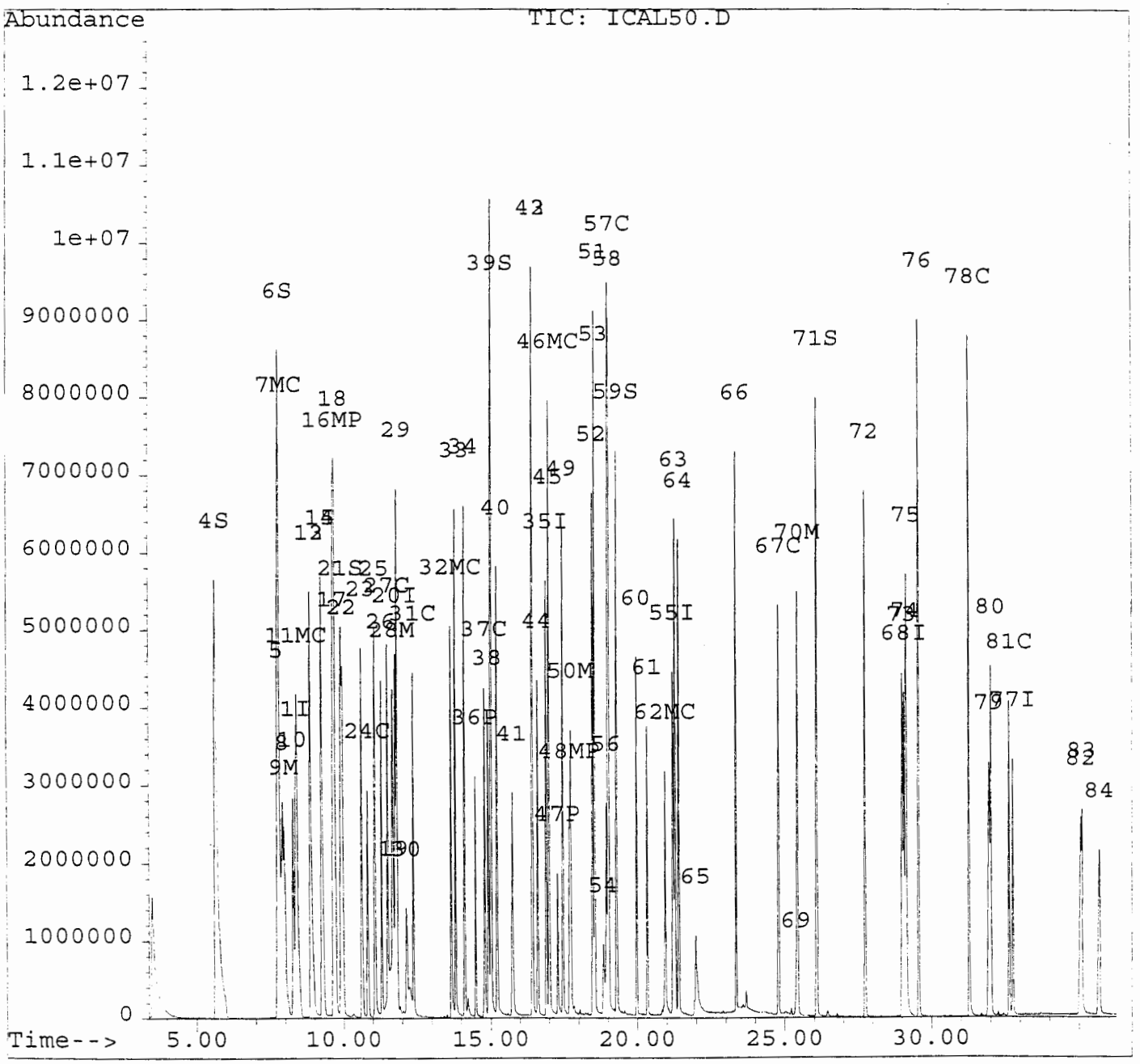
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
83)	Dibenz[a,h]anthracene	35.11	278	2732135	51.61 ppb	98
84)	Benzo[g,h,i]perylene	35.69	276	2881157	47.73 ppb	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL50.D Vial: 6
Acq On : 7 Aug 98 1:14 pm Operator: TMJ
Sample : 8270 Initial Calibration 50 µg/ml S2,11, Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 14:19 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL80.D Vial: 7
Acq On : 7 Aug 98 1:58 pm Operator: TMJ
Sample : 8270 Initial Calibration 80 µg/ml S2,11, Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 15:41 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.38	152	1434438	40.00 ppb	0.00
20) Naphthalene-d8	11.79	136	5138605	40.00 ppb	0.00
35) Acenaphthene-d10	16.91	164	3249731	40.00 ppb	0.00
55) Phenanthrene-d10	21.23	188	4597784	40.00 ppb	0.00
68) Chyrsene-d12	29.10	240	3284422	40.00 ppb	0.00
77) Perylene-d12	32.78	264	2241771	40.00 ppb	0.00

System Monitoring Compounds					%Recovery
4) 2-Fluorophenol (s.s.)	5.65	112	12252774	95.14 ppb	47.57%
6) Phenol-d5 (s.s)	7.80	99	12973976	90.09 ppb	45.04%
21) Nitrobenzene-d5 (s.s)	9.94	82	6364677	74.03 ppb	74.03%
39) 2-Fluorobiphenyl (s.s)	15.04	172	9270696	70.73 ppb	70.73%
59) 2,4,6-Tribromophenol (s.s)	19.33	330	1706847	90.22 ppb	45.11%
71) Terphenyl-d14 (s.s)	26.12	244	7179471	71.61 ppb	71.61%

MM 8-10-98

arget Compounds						Qvalue
2) Pyridine	3.47	79	3306725	75.62 ppb	m✓	99
3) N-Nitrosodimethylamine	3.51	74	2680529	75.67 ppb		99
5) Aniline	7.73	93	5257295	78.72 ppb		88
7) Phenol	7.83	94	5534535	77.18 ppb	#	67
8) bis(2-Chloroethyl)ether	7.94	63	3642271	81.58 ppb	#	74
9) 2-Chlorophenol	7.97	128	4093024	80.50 ppb		99
10) 1,3-Dichlorobenzene	8.28	146	3828220	77.51 ppb		100
11) 1,4-Dichlorobenzene	8.41	146	4234833	79.43 ppb		98
12) 1,2-Dichlorobenzene	8.87	146	3697703	77.80 ppb		99
13) Benzyl alcohol	8.90	108	3049633	81.84 ppb		99
14) 2-Methylphenol	9.26	108	4096658	76.10 ppb		94
15) bis(2-Chloroisopropyl) eth	9.24	45	5738198	72.36 ppb	#	86
16) n-Nitroso-di-n-propylamine	9.77	70	3319576	74.23 ppb	m✓	99
17) Hexachloroethane	9.64	117	1867792	79.50 ppb		99
18) 3&4-Methylphenol	9.73	108	7703888	97.81 ppb		99
19) Benzoic acid	11.83	122	2685248	90.79 ppb	m✓	91
22) Nitrobenzene	9.99	77	4678919	76.39 ppb		100
23) Isophorone	10.64	82	9366460	76.79 ppb		100
24) 2-Nitrophenol	10.85	139	2504230	80.47 ppb	m✓	98
25) 2,4-Dimethylphenol	11.10	107	4597580	76.36 ppb		99
26) bis(2-Chloroethoxy)methane	11.33	93	5069347	76.21 ppb		99
27) 2,4-Dichlorophenol	11.54	162	3106770	77.58 ppb		99
28) 1,2,4-Trichlorobenzene	11.69	180	2962817	78.77 ppb		100
29) Naphthalene	11.85	128	9697341	76.48 ppb		100
30) 4-Chloroaniline	12.16	127	3841743	78.05 ppb		98
31) Hexachlorobutadiene	12.39	225	1547558	74.96 ppb		100
32) 4-Chloro-3-methylphenol	13.69	107	4023809	77.89 ppb	#	38

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL80.D Vial: 7
Acq On : 7 Aug 98 1:58 pm Operator: TMJ
Sample : 8270 Initial Calibration 80 µg/ml S2,11, Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 15:41 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration

JM 8-10-98

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
33)	2-Methylnaphthalene	13.83	142	6496082	76.93 ppb		99
34)	1-Methylnaphthalene	14.15	142	6146305	76.35 ppb		98
36)	Hexachlorocyclopentadiene	14.50	237	1404261	77.06 ppb		98
37)	2,4,6-Trichlorophenol	14.82	196	1658593	77.39 ppb		100
38)	2,4,5-Trichlorophenol	14.93	196	1761293	78.60 ppb		100
40)	2-Chloronaphthalene	15.24	162	6245964	74.35 ppb		99
41)	2-Nitroaniline	15.77	65	2898005	77.54 ppb		99
42)	Dimethylphthalate	16.45	163	7820170	72.81 ppb		100
43)	Acenaphthylene	16.46	152	8990016	71.75 ppb		100
44)	2,6-Dinitrotoluene	16.65	165	2099321	79.42 ppb		98
45)	3-Nitroaniline	17.04	138	1110379	60.40 ppb		97
46)	Acenaphthene	17.03	153	5821977	75.09 ppb		98
47)	2,4-Dinitrophenol	17.32	184	1133795	100.06 ppb		97
48)	4-Nitrophenol	17.72	109	1387079	75.07 ppb		96
49)	Dibenzofuran	17.49	168	9143545	74.78 ppb		99
50)	2,4-Dinitrotoluene	17.78	165	2883017	77.46 ppb	#	78
51)	Diethylphthalate	18.58	149	7351755	70.81 ppb		99
52)	Fluorene	18.51	166	7534329	74.46 ppb		100
53)	4-Chlorophenyl-phenylether	18.59	204	2526184	72.51 ppb		98
54)	4-Nitroaniline	18.90	138	1265279	61.27 ppb		87
56)	4,6-Dinitro-2-methylphenol	19.00	198	1251783	86.71 ppb	#	21
57)	n-Nitrosodiphenylamine	19.04	169	3864125	61.48 ppb		94
58)	1,2-Diphenylhydrazine	19.08	77	15662004	69.79 ppb	#	87
60)	4-Bromophenyl-phenylether	20.00	248	1417137	75.21 ppb		99
61)	Hexachlorobenzene	20.38	284	1351590	75.02 ppb		100
62)	Pentachlorophenol	20.98	266	968623	81.29 ppb		99
63)	Phenanthrene	21.31	178	8935818	73.59 ppb		100
64)	Anthracene	21.45	178	8748561	74.59 ppb		100
65)	Carbazole	21.99	167	4408108	48.19 ppb		98
66)	Di-n-butylphthalate	23.38	149	12896187	73.02 ppb		100
67)	Fluoranthene	24.83	202	8140298	74.21 ppb		99
69)	Benzidine	25.39	184	695108	36.90 ppb	m✓	99
70)	Pyrene	25.47	202	8332908	76.08 ppb		99
72)	Butylbenzylphthalate	27.78	149	6283363	77.38 ppb		100
73)	Benzo[a]anthracene	29.06	228	7841314	78.10 ppb		100
74)	3,3'-Dichlorobenzidine	29.15	252	1644203	75.45 ppb		98
75)	Chrysene	29.20	228	6751617	76.02 ppb		99
76)	bis(2-Ethylhexyl)phthalate	29.60	149	7772932	75.45 ppb		100
78)	Di-n-octylphthalate	31.30	149	13150463	84.32 ppb		100
79)	Benzo[b]fluoranthene	32.00	252	7345765	89.28 ppb		99
80)	Benzo[k]fluoranthene	32.05	252	4921426	77.86 ppb	m✓	98
81)	Benzo[a]pyrene	32.67	252	5540020	84.70 ppb		99
82)	Indeno[1,2,3-cd]pyrene	35.07	276	5190266	82.81 ppb	#	88

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL80.D Vial: 7
Acq On : 7 Aug 98 1:58 pm Operator: TMJ
Sample : 8270 Initial Calibration 80 µg/ml S2,11, Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 15:41 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration

M 8.10.98

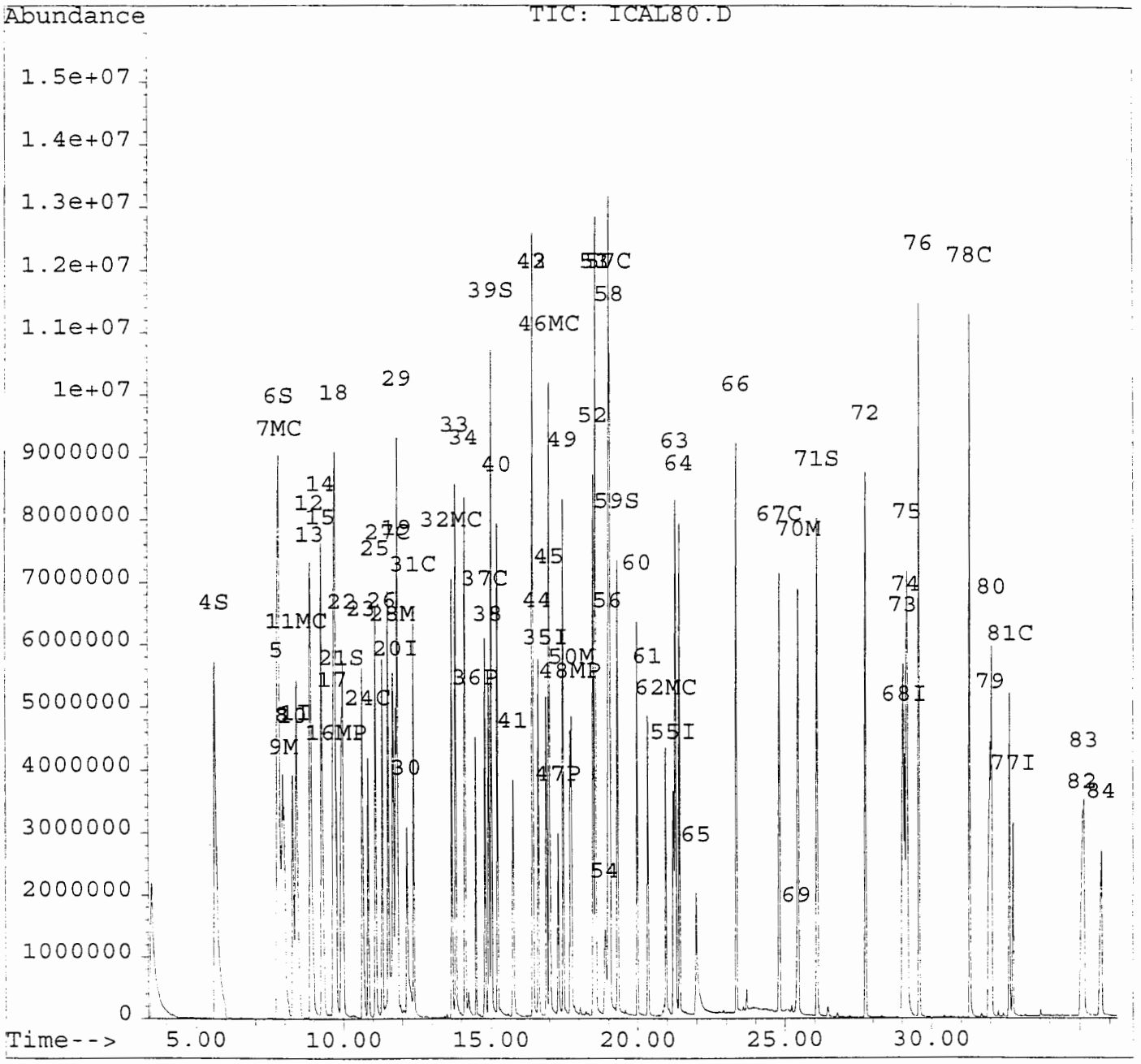
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
83) Dibenz[a,h]anthracene	35.14	278	3994591	80.24 ppb	98
84) Benzo[g,h,i]perylene	35.73	276	4312825	78.51 ppb	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL80.D Vial: 7
Acq On : 7 Aug 98 1:58 pm Operator: TMJ
Sample : 8270 Initial Calibration 80 µg/ml S2,11, Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 15:41 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL100.D Vial: 8
Acq On : 7 Aug 98 2:42 pm Operator: TMJ
Sample : 8270 Initial Calibration 100 µg/ml S2,11 Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 15:44 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.38	152	1473519	40.00	ppb	0.01
20) Naphthalene-d8	11.80	136	5355482	40.00	ppb	0.01
35) Acenaphthene-d10	16.92	164	3392788	40.00	ppb	0.00
55) Phenanthrene-d10	21.23	188	4783302	40.00	ppb	0.01
68) Chyrsene-d12	29.11	240	3383974	40.00	ppb	0.01
77) Perylene-d12	32.78	264	2359631	40.00	ppb	0.01

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol (s.s.)	5.65	112	14122997	106.76	ppb	53.38%
6) Phenol-d5 (s.s)	7.82	99	14695522	99.33	ppb	49.67%
21) Nitrobenzene-d5 (s.s)	9.95	82	7303855	81.52	ppb	81.52%
39) 2-Fluorobiphenyl (s.s)	15.05	172	10481422	76.60	ppb	76.60%
59) 2,4,6-Tribromophenol (s.s)	19.35	330	1996872	101.45	ppb	50.73%
71) Terphenyl-d14 (s.s)	26.13	244	8291540	80.27	ppb	80.27%

JM 8-10-98

Target Compounds							Qvalue
2) Pyridine	3.47	79	4347665	96.78	ppb	m✓	98
3) N-Nitrosodimethylamine	3.51	74	3381166	92.91	ppb		100
5) Aniline	7.73	93	6602198	96.24	ppb		95
7) Phenol	7.85	94	6873042	93.30	ppb	#	73
8) bis(2-Chloroethyl)ether	7.95	63	4254634	92.77	ppb	#	81
9) 2-Chlorophenol	7.98	128	5155723	98.72	ppb		99
10) 1,3-Dichlorobenzene	8.28	146	4759131	93.81	ppb		100
11) 1,4-Dichlorobenzene	8.42	146	5334615	97.41	ppb		98
12) 1,2-Dichlorobenzene	8.88	146	4610911	94.44	ppb		100
13) Benzyl alcohol	8.92	108	3852456	100.65	ppb		99
14) 2-Methylphenol	9.28	108	5098224	92.20	ppb		95
15) bis(2-Chloroisopropyl) eth	9.25	45	7052082	86.57	ppb	#✓	86
16) n-Nitroso-di-n-propylamine	9.80	70	4191607	91.24	ppb	m✓	98
17) Hexachloroethane	9.65	117	2380363	98.63	ppb		98
18) 3&4-Methylphenol	9.75	108	9773626	120.80	ppb		99
19) Benzoic acid	11.90	122	3423035	112.66	ppb	m✓	1
22) Nitrobenzene	10.00	77	5849790	91.64	ppb		99
23) Isophorone	10.66	82	12006552	94.45	ppb		100
24) 2-Nitrophenol	10.86	139	2941648	90.70	ppb		98
25) 2,4-Dimethylphenol	11.12	107	5874402	93.62	ppb		100
26) bis(2-Chloroethoxy)methane	11.34	93	6424762	92.68	ppb		100
27) 2,4-Dichlorophenol	11.55	162	3850511	92.25	ppb		98
28) 1,2,4-Trichlorobenzene	11.71	180	3678904	93.85	ppb		100
29) Naphthalene	11.87	128	12049684	91.18	ppb		100
30) 4-Chloroaniline	12.18	127	4919519	95.90	ppb		100
31) Hexachlorobutadiene	12.41	225	1938511	90.09	ppb		100
32) 4-Chloro-3-methylphenol	13.70	107	5002148	92.90	ppb	#	38

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL100.D Vial: 8
Acq On : 7 Aug 98 2:42 pm Operator: TMJ
Sample : 8270 Initial Calibration 100 µg/ml S2,11 Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 15:44 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration

M 8-10-98

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
33)	2-Methylnaphthalene	13.84	142	8151243	92.62	ppb		99
34)	1-Methylnaphthalene	14.15	142	7822701	93.24	ppb		99
36)	Hexachlorocyclopentadiene	14.50	237	1806180	94.94	ppb		99
37)	2,4,6-Trichlorophenol	14.83	196	2085662	93.21	ppb		99
38)	2,4,5-Trichlorophenol	14.95	196	2154750	92.10	ppb		99
40)	2-Chloronaphthalene	15.26	162	7844228	89.44	ppb		99
41)	2-Nitroaniline	15.79	65	3632333	93.09	ppb		98
42)	Dimethylphthalate	16.47	163	9707303	86.56	ppb		100
43)	Acenaphthylene	16.47	152	10987101	84.00	ppb		100
44)	2,6-Dinitrotoluene	16.66	165	2652821	96.12	ppb		100
45)	3-Nitroaniline	17.05	138	1730350	90.16	ppb		100
46)	Acenaphthene	17.03	153	7281892	89.96	ppb		98
47)	2,4-Dinitrophenol	17.34	184	1508250	127.50	ppb		98
48)	4-Nitrophenol	17.75	109	1806769	93.67	ppb		97
49)	Dibenzofuran	17.51	168	11433455	89.56	ppb		99
50)	2,4-Dinitrotoluene	17.79	165	3666538	94.36	ppb	#	79
51)	Diethylphthalate	18.61	149	9032686	83.33	ppb		98
52)	Fluorene	18.52	166	9505267	89.98	ppb		100
53)	4-Chlorophenyl-phenylether	18.60	204	3213486	88.35	ppb		96
54)	4-Nitroaniline	18.95	138	1694418	78.59	ppb		97
56)	4,6-Dinitro-2-methylphenol	19.03	198	1503097	100.08	ppb	#	1
57)	n-Nitrosodiphenylamine	19.06	169	4740074	72.50	ppb		94
58)	1,2-Diphenylhydrazine	19.09	77	18955791	81.20	ppb	#	88
60)	4-Bromophenyl-phenylether	20.01	248	1757206	89.64	ppb		99
61)	Hexachlorobenzene	20.39	284	1688404	90.08	ppb		100
62)	Pentachlorophenol	20.99	266	1235183	99.64	ppb		99
63)	Phenanthrene	21.33	178	11320470	89.61	ppb		100
64)	Anthracene	21.47	178	10791309	88.44	ppb		100
65)	Carbazole	22.01	167	6550571	68.84	ppb		99
66)	Di-n-butylphthalate	23.38	149	15983856	86.99	ppb		100
67)	Fluoranthene	24.85	202	10248315	89.80	ppb		99
69)	Benzidine	25.40	184	1177392	60.66	ppb	m✓	100
70)	Pyrene	25.49	202	10392872	92.09	ppb		100
72)	Butylbenzylphthalate	27.79	149	7824985	93.53	ppb		100
73)	Benzo[a]anthracene	29.06	228	9795820	94.70	ppb		100
74)	3,3'-Dichlorobenzidine	29.17	252	2310689	102.91	ppb		98
75)	Chrysene	29.22	228	8496107	92.85	ppb		99
76)	bis(2-Ethylhexyl)phthalate	29.61	149	9680062	91.20	ppb		100
78)	Di-n-octylphthalate	31.32	149	16310885	99.36	ppb		100
79)	Benzo[b]fluoranthene	32.02	252	9990236	115.35	ppb		99
80)	Benzo[k]fluoranthene	32.07	252	5411381	81.34	ppb	m✓	98
1)	Benzo[a]pyrene	32.68	252	7054153	102.47	ppb		99
82)	Indeno[1,2,3-cd]pyrene	35.08	276	6579686	99.73	ppb		89

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL100.D Vial: 8
Acq On : 7 Aug 98 2:42 pm Operator: TMJ
Sample : 8270 Initial Calibration 100 µg/ml S2,11 Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 15:44 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration

JM 8-10-98

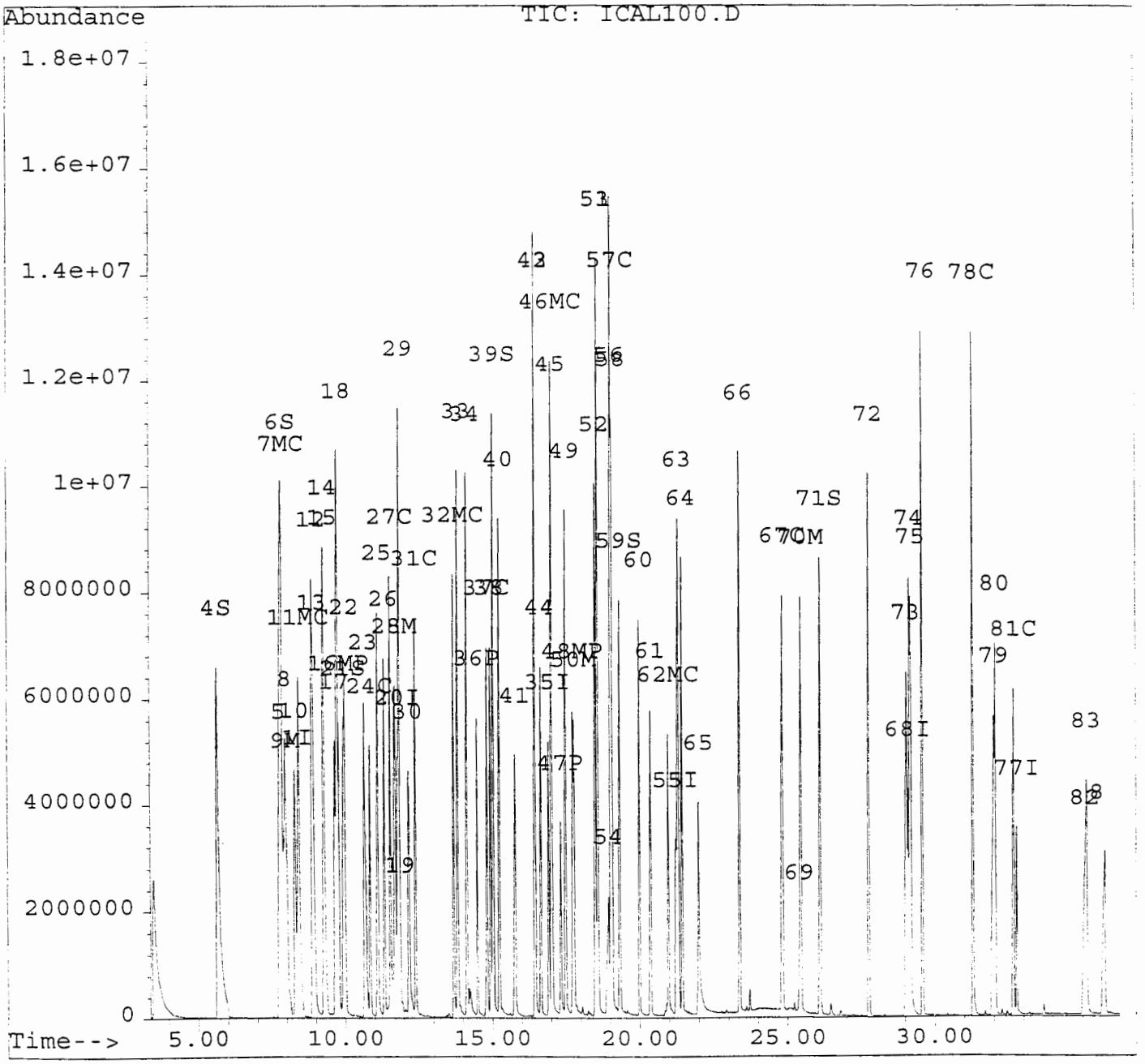
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
83) Dibenz[a,h]anthracene	35.15	278	5005192	95.52 ppb	97
84) Benzo[g,h,i]perylene	35.76	276	5469948	94.60 ppb	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL100.D Vial: 8
Acq On : 7 Aug 98 2:42 pm Operator: TMJ
Sample : 8270 Initial Calibration 100 µg/ml S2,11 Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 15:44 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL120.D Vial: 9
Acq On : 7 Aug 98 3:25 pm Operator: TMJ
Sample : 8270 Initial Calibration 120 µg/ml S2,11 Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 16:10 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.39	152	1405188	40.00	ppb	0.02
20) Naphthalene-d8	11.81	136	5066109	40.00	ppb	0.02
35) Acenaphthene-d10	16.92	164	3205675	40.00	ppb	0.00
55) Phenanthrene-d10	21.24	188	4585531	40.00	ppb	0.02
68) Chyrsene-d12	29.12	240	3201831	40.00	ppb	0.02
77) Perylene-d12	32.78	264	2206370	40.00	ppb	0.01

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol (s.s.)	5.66	112	16951348	134.37	ppb	67.18%
6) Phenol-d5 (s.s)	7.83	99	17478214	123.89	ppb	61.94%
21) Nitrobenzene-d5 (s.s)	9.96	82	8613266	101.62	ppb	101.62%
39) 2-Fluorobiphenyl (s.s)	15.06	172	12543293	97.02	ppb	97.02%
59) 2,4,6-Tribromophenol (s.s)	19.36	330	2422977	128.41	ppb	64.20%
71) Terphenyl-d14 (s.s)	26.14	244	10025829	102.59	ppb	102.59%

JM 8-10-98

Target Compounds							Qvalue
2) Pyridine	3.48	79	5082024	118.63	ppb	m✓	98
3) N-Nitrosodimethylamine	3.51	74	3784387	109.05	ppb		99
5) Aniline	7.73	93	7226874	110.47	ppb	#	80
7) Phenol	7.87	94	7686327	109.41	ppb	#	74
8) bis(2-Chloroethyl)ether	7.96	63	4827721	110.38	ppb	#	79
9) 2-Chlorophenol	8.00	128	5858643	117.63	ppb		99
10) 1,3-Dichlorobenzene	8.29	146	5408539	111.79	ppb		99
11) 1,4-Dichlorobenzene	8.42	146	6228803	119.27	ppb		97
12) 1,2-Dichlorobenzene	8.88	146	5297555	113.78	ppb		100
13) Benzyl alcohol	8.93	108	4415852	120.97	ppb		99
14) 2-Methylphenol	9.29	108	5750577	109.05	ppb		95
15) bis(2-Chloroisopropyl) eth	9.25	45	7962478	102.50	ppb	#	26
16) n-Nitroso-di-n-propylamine	9.82	70	4640659	105.93	ppb	m✓	98
17) Hexachloroethane	9.65	117	2728517	118.55	ppb		98
18) 3&4-Methylphenol	9.77	108	11139975	144.38	ppb		99
19) Benzoic acid	11.94	122	4023747	138.87	ppb	m✓	1
22) Nitrobenzene	10.01	77	6590571	109.14	ppb		99
23) Isophorone	10.67	82	13876041	115.39	ppb		99
24) 2-Nitrophenol	10.86	139	3596735	117.23	ppb	m✓	98
25) 2,4-Dimethylphenol	11.13	107	6655911	112.13	ppb		100
26) bis(2-Chloroethoxy)methane	11.35	93	7269781	110.86	ppb		100
27) 2,4-Dichlorophenol	11.56	162	4372127	110.73	ppb		98
28) 1,2,4-Trichlorobenzene	11.71	180	4213827	113.63	ppb		100
29) Naphthalene	11.87	128	13477238	107.81	ppb		100
30) 4-Chloroaniline	12.18	127	5514058	113.63	ppb		100
31) Hexachlorobutadiene	12.41	225	2187658	107.48	ppb		100
32) 4-Chloro-3-methylphenol	13.70	107	5586802	109.69	ppb	#	38

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL120.D Vial: 9
Acq On : 7 Aug 98 3:25 pm Operator: TMJ
Sample : 8270 Initial Calibration 120 µg/ml S2,11 Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 16:10 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration

JM 8-10-98

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
33)	2-Methylnaphthalene	13.85	142	9212052	110.65	ppb		100
34)	1-Methylnaphthalene	14.16	142	8790808	110.76	ppb		98
36)	Hexachlorocyclopentadiene	14.51	237	2044529	113.74	ppb		99
37)	2,4,6-Trichlorophenol	14.83	196	2375035	112.34	ppb		100
38)	2,4,5-Trichlorophenol	14.96	196	2500391	113.12	ppb		98
40)	2-Chloronaphthalene	15.26	162	8709112	105.10	ppb		100
41)	2-Nitroaniline	15.80	65	4062518	110.19	ppb		99
42)	Dimethylphthalate	16.47	163	11037950	104.18	ppb		99
43)	Acenaphthylene	16.48	152	12388331	100.24	ppb		100
44)	2,6-Dinitrotoluene	16.67	165	3029327	116.17	ppb		99
45)	3-Nitroaniline	17.06	138	2033765	112.15	ppb		100
46)	Acenaphthene	17.05	153	8106661	105.99	ppb		99
47)	2,4-Dinitrophenol	17.35	184	1743693	156.00	ppb		97
48)	4-Nitrophenol	17.76	109	2044690	112.19	ppb		97
49)	Dibenzofuran	17.51	168	12884593	106.82	ppb		99
50)	2,4-Dinitrotoluene	17.81	165	4072610	110.93	ppb	#	77
51)	Diethylphthalate	18.63	149	10367157	101.22	ppb		99
52)	Fluorene	18.53	166	10676977	106.97	ppb		100
53)	4-Chlorophenyl-phenylether	18.60	204	3696654	107.57	ppb		96
54)	4-Nitroaniline	18.98	138	1945579	95.50	ppb		96
56)	4,6-Dinitro-2-methylphenol	19.05	198	1682949	116.89	ppb	#	1
57)	n-Nitrosodiphenylamine	19.08	169	5380450	85.84	ppb		95
58)	1,2-Diphenylhydrazine	19.10	77	21309996	95.22	ppb		88
60)	4-Bromophenyl-phenylether	20.02	248	2017405	107.36	ppb		99
61)	Hexachlorobenzene	20.39	284	1934998	107.69	ppb		100
62)	Pentachlorophenol	20.99	266	1420071	119.49	ppb		99
63)	Phenanthrene	21.34	178	12731032	105.12	ppb		100
64)	Anthracene	21.47	178	12333312	105.44	ppb		100
65)	Carbazole	22.02	167	7823730	85.76	ppb		99
66)	Di-n-butylphthalate	23.39	149	18167302	103.14	ppb		99
67)	Fluoranthene	24.85	202	11701900	106.96	ppb		100
69)	Benzidine	25.39	184	1097849	59.77	ppb		99
70)	Pyrene	25.49	202	11786477	110.38	ppb		100
72)	Butylbenzylphthalate	27.80	149	8893021	112.34	ppb		100
73)	Benzo[a]anthracene	29.08	228	11176585	114.19	ppb		100
74)	3,3'-Dichlorobenzidine	29.18	252	2819554	132.72	ppb		98
75)	Chrysene	29.23	228	9762047	112.75	ppb		99
76)	bis(2-Ethylhexyl)phthalate	29.61	149	11070077	110.22	ppb		100
78)	Di-n-octylphthalate	31.33	149	18597452	121.16	ppb		100
79)	Benzo[b]fluoranthene	32.04	252	9272012	114.49	ppb	m✓	98
80)	Benzo[k]fluoranthene	32.08	252	5867828	94.32	ppb	m✓	97
81)	Benzo[a]pyrene	32.69	252	7883550	122.47	ppb		98
82)	Indeno[1,2,3-cd]pyrene	35.11	276	7268063	117.82	ppb	m✓	43

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL120.D Vial: 9
Acq On : 7 Aug 98 3:25 pm Operator: TMJ
Sample : 8270 Initial Calibration 120 µg/ml S2,11 Inst : HP 5971 -
Misc : IS:S2,10,7 Multiplr: 1.00
Quant Time: Aug 7 16:10 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration

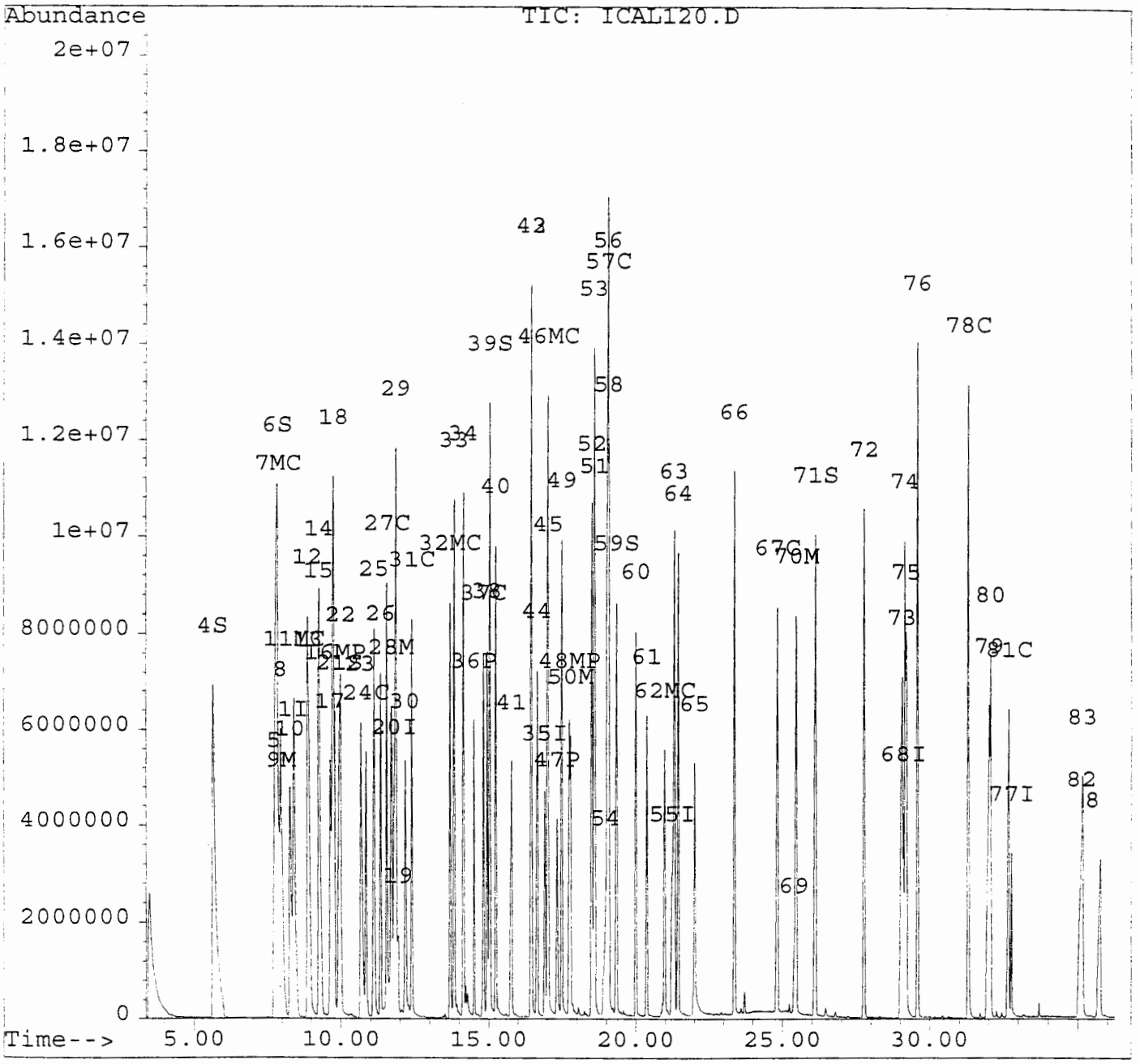
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
83) Dibenz[a,h]anthracene	35.17	278	5565927	113.60	ppb	97
84) Benzo[g,h,i]perylene	35.76	276	6055384	112.00	ppb	98

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F07AUG98\ICAL120.D
Acq On : 7 Aug 98 3:25 pm
Sample : 8270 Initial Calibration 120 µg/ml S2,11
Misc : IS:S2,10,7
Quant Time: Aug 7 16:10 1998

Vial: 9
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Aug 07 16:20:47 1998
Response via : Multiple Level Calibration



Response Factor Report INST-E

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Initial Calibration

Calibration Files
5 =ICAL5.D 20 =ICAL20.D 50 =ICAL50.D
80 =ICAL80.D 100 =ICAL100.D 120 =ICAL120.D

		Compound	5	20	50	80	100	120	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------	----------	----------	ISTD	----------	----------	----------	
2)		Pyridine	1.203	1.113	1.055	0.961	1.008	0.965	1.051	8.97
3)		N-Nitrosodimethylam	0.679	0.779	0.822	0.857	0.836	0.867	0.807	8.67
4)	S	2-Fluorophenol (s.s	1.211	1.317	1.339	1.395	1.372	1.408	1.340	5.36
5)		Aniline	1.635	2.027	2.104	2.054	1.991	1.986	1.966	8.56
6)	S	Phenol-d5 (s.s)	1.500	1.598	1.605	1.632	1.617	1.630	1.597	3.08
7)	MC	Phenol	1.932	1.882	1.715	1.746	1.663	1.678	1.769	6.31✓
8)		bis(2-Chloroethyl)e	1.163	1.347	1.408	1.376	1.350	1.311	1.326	6.49
9)	M	2-Chlorophenol	1.520	1.476	1.473	1.440	1.417	1.430	1.459	2.60
10)		1,3-Dichlorobenzene	1.313	1.407	1.429	1.470	1.431	1.438	1.415	3.79
11)	MC	1,4-Dichlorobenzene	1.468	1.549	1.511	1.493	1.494	1.521	1.506	1.85✓
12)		1,2-Dichlorobenzene	1.322	1.401	1.383	1.371	1.390	1.386	1.375	2.03
13)		Benzyl Alcohol	0.959	0.921	0.944	0.955	0.964	1.004	0.958	2.85
14)		2-Methylphenol	1.308	1.266	1.272	1.212	1.216	1.265	1.257	2.90
15)		Bis(2-chloroisoprop	1.481	1.497	1.464	1.407	1.390	1.413	1.442	3.07
16)	MP	n-Nitroso-di-n-prop	0.915	0.995	0.786	0.956	0.945	0.990	0.931✓	8.27
7)		Hexachloroethane	0.550	0.588	0.622	0.601	0.612	0.631	0.601	4.87
3)		3&4-Methylphenol	1.261	1.290	1.247	1.211	1.216	1.281	1.251	2.63
19)		Benzoic Acid	0.619	0.742	0.870	0.931	0.985	1.045	0.865	18.41
20)	I	Naphthalene-d8	----------	----------	----------	ISTD	----------	----------	----------	
21)	S	Nitrobenzene-d5 (s.	0.356	0.372	0.382	0.394	0.377	0.382	0.377	3.34
22)		Nitrobenzene	0.367	0.380	0.392	0.390	0.369	0.370	0.378	2.95
23)		Isophorone	0.724	0.766	0.816	0.827	0.790	0.797	0.787	4.76
24)	C	2-Nitrophenol	0.225	0.227	0.239	0.244	0.238	0.243	0.236	3.42✓
25)		2,4-Dimethylphenol	0.414	0.398	0.392	0.392	0.386	0.386	0.395	2.70
26)		bis(2-Chloroethoxy)	0.453	0.472	0.484	0.477	0.455	0.461	0.467	2.72
27)	C	2,4-Dichlorophenol	0.320	0.300	0.297	0.292	0.284	0.281	0.296	4.70✓
28)	M	1,2,4-Trichlorobenz	0.276	0.296	0.294	0.289	0.280	0.280	0.286	2.84
29)		Naphthalene	1.068	1.066	1.003	0.957	0.889	0.857	0.974	9.12
30)		4-Chloroaniline	0.442	0.459	0.462	0.454	0.430	0.435	0.447	2.88
31)	C	Hexachlorobutadiene	0.147	0.150	0.149	0.141	0.135	0.135	0.143	4.81✓
32)	MC	4-Chloro-3-methylph	0.360	0.343	0.353	0.341	0.327	0.336	0.343	3.38✓
33)		2-Methylnaphthalene	0.633	0.671	0.664	0.626	0.592	0.589	0.629	5.48
34)		1-Methylnaphthalene	0.612	0.640	0.627	0.596	0.558	0.576	0.602	5.14
35)	I	Acenaphthene-d10	----------	----------	----------	ISTD	----------	----------	----------	
36)	P	Hexachlorocyclopent	0.257	0.298	0.309	0.305	0.298	0.276	0.291✓	6.91
37)	C	2,4,6-Trichlorophen	0.413	0.392	0.381	0.370	0.363	0.343	0.377	6.48✓
38)		2,4,5-Trichlorophen	0.427	0.429	0.403	0.384	0.370	0.364	0.396	7.08
39)	S	2-Fluorobiphenyl (s	1.327	1.248	1.095	1.104	1.095	1.043	1.152	9.56
40)		2-Chloronaphthalene	1.190	1.162	1.121	1.059	1.014	0.979	1.087	7.72
)		2-Nitroaniline	0.386	0.407	0.414	0.406	0.400	0.394	0.401	2.55

(#) = Out of Range

Response Factor Report INST-E

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Initial Calibration

Calibration Files
5 =ICAL5.D 20 =ICAL20.D 50 =ICAL50.D
80 =ICAL80.D 100 =ICAL100.D 120 =ICAL120.D

		Compound	5	20	50	80	100	120	Avg	%RSD
42)		Dimethylphthalate	1.439	1.464	1.354	1.314	1.278	1.257	1.351	6.28
43)		Acenaphthylene	1.904	1.972	1.777	1.691	1.625	1.542	1.752	9.42
44)		2,6-Dinitrotoluene	0.283	0.342	0.364	0.357	0.348	0.342	0.339	8.51
45)		3-Nitroaniline	0.288	0.383	0.374	0.369	0.360	0.347	0.354	9.71
46)	MC	Acenaphthene	1.169	1.210	1.128	1.073	1.023	1.011	1.102	7.25
47)	P	2,4-Dinitrophenol	0.131	0.185	0.240	0.259	0.259	0.254	0.221	23.76
48)	MP	4-Nitrophenol	0.169	0.188	0.216	0.222	0.223	0.218	0.206	10.78
49)		Dibenzofuran	1.568	1.680	1.572	1.467	1.479	1.409	1.529	6.34
50)	M	2,4-Dinitrotoluene	0.413	0.498	0.514	0.507	0.504	0.494	0.488	7.68
51)		Diethylphthalate	1.619	1.627	1.422	1.363	1.352	1.364	1.458	8.94
52)		Fluorene	1.303	1.399	1.274	1.224	1.180	1.147	1.255	7.27
53)		4-Chlorophenyl-phen	0.608	0.603	0.553	0.534	0.527	0.519	0.557	6.97
54)		4-Nitroaniline	0.298	0.372	0.415	0.387	0.349	0.306	0.354	13.01
55)	I	Phenanthrene-d10	----------ISTD----------							
56)		4,6-Dinitro-2-methy	0.132	0.160	0.175	0.150	0.137	0.126	0.147	12.63
57)	C	n-Nitrosodiphenylam	0.534	0.532	0.464	0.401	0.376	0.361	0.445	17.29
`)		1,2-Diphenylhydrazi	1.793	1.821	1.681	1.539	1.468	1.459	1.627	9.89
)	S	2,4,6-Tribromopheno	0.102	0.098	0.087	0.087	0.082	0.079	0.089	10.12
60)		4-Bromophenyl-pheny	0.194	0.195	0.189	0.182	0.167	0.171	0.183	6.48
61)		Hexachlorobenzene	0.202	0.202	0.203	0.186	0.176	0.175	0.191	6.90
62)	MC	Pentachlorophenol	0.158	0.144	0.152	0.157	0.146	0.151	0.151	3.70
63)		Phenanthrene	1.074	1.091	1.061	0.970	0.936	0.949	1.014	6.84
64)		Anthracene	1.058	1.064	1.032	0.948	0.903	0.910	0.986	7.54
65)		Carbazole	0.907	0.919	0.921	0.882	0.863	0.882	0.896	2.60
66)		Di-n-butylphthalate	1.682	1.656	1.590	1.406	1.274	1.232	1.473	13.33
67)	C	Fluoranthene	1.152	1.112	1.033	1.015	0.973	0.972	1.043	7.09
68)	I	Chyrsene-d12	----------ISTD----------							
69)		Benzidine		0.372	0.528	0.495	0.514	0.519	0.486	13.35
70)	M	Pyrene	1.417	1.553	1.439	1.317	1.364	1.383	1.412	5.74
71)	S	Terphenyl-d14 (s.s)	0.989	0.949	0.853	0.849	0.846	0.859	0.891	6.96
72)		Butylbenzylphthalat	0.990	1.005	0.988	0.944	0.951	0.973	0.975	2.46
73)		Benzo[a]anthracene	1.293	1.315	1.318	1.262	1.248	1.291	1.288	2.18
74)		3,3'-Dichlorobenzid	0.283	0.389	0.407	0.389	0.382	0.372	0.370	11.94
75)		Chrysene	1.190	1.194	1.088	1.034	1.007	1.013	1.088	7.86
76)		bis(2-Ethylhexyl)ph	1.565	1.425	1.327	1.242	1.234	1.223	1.336	10.17
77)	I	Perylene-d12	----------ISTD----------							
78)	C	Di-n-octylphthalate	2.449	2.538	2.214	2.054	2.023	2.034	2.219	10.17
79)		Benzo[b]fluoranthen	1.464	1.387	1.395	1.352	1.546	1.281	1.404	6.53
80)		Benzo[k]fluoranthen	1.162	1.346	1.056	1.005	0.890	1.120	1.096	14.10
81)	C	Benzo[a]pyrene	1.149	1.257	1.184	1.149	1.143	1.170	1.175	3.65
`		Indeno[1,2,3-cd]pyr	1.067	1.252	1.246	1.183	1.250	1.313	1.218	6.95

(#) = Out of Range

Response Factor Report INST-E

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Initial Calibration

Calibration Files

5	=ICAL5.D	20	=ICAL20.D	50	=ICAL50.D
80	=ICAL80.D	100	=ICAL100.D	120	=ICAL120.D

	Compound	5	20	50	80	100	120	Avg	%RSD
83)	Dibenz[a,h]anthrace	0.966	1.124	1.062	0.961	0.985	0.989	1.014	6.41
84)	Benzo[g,h,i]perylen	1.062	1.263	1.146	1.058	1.078	1.104	1.118	6.95

(#) = Out of Range

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E30SEP98\ICAL5.D
Acq On : 30 Sep 98 9:38 am
Sample : 8270 Initial Cal 5 µg/ml S2,17,3
Misc : IS S2,16,6
Quant Time: Sep 30 15:32 1998

Vial: 4
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.37	152	2220012	40.00 ppb	0.00
20) Naphthalene-d8	13.00	136	7751382	40.00 ppb	-0.02
35) Acenaphthene-d10	18.46	164	4074847	40.00 ppb	-0.02
55) Phenanthrene-d10	23.05	188	6806902	40.00 ppb	-0.02
68) Chyrsene-d12	31.39	240	5598186	40.00 ppb	-0.02
77) Perylene-d12	36.54	264	5100242	40.00 ppb	-0.03

System Monitoring Compounds					%Recovery
4) 2-Fluorophenol (s.s)	6.46	112	1344753	18.68 ppb	9.34%
6) Phenol-d5 (s.s)	8.78	99	1665531	19.98 ppb	9.99%
21) Nitrobenzene-d5 (s.s)	11.03	82	689949	9.29 ppb	9.29%
39) 2-Fluorobiphenyl (s.s)	16.45	172	1351958	11.33 ppb	11.33%
59) 2,4,6-Tribromophenol (s.s)	20.97	330	348280	16.04 ppb	8.02%
71) Terphenyl-d14 (s.s)	28.18	244	1384294	11.27 ppb	11.27%

M 9-30-98

Target Compounds						Qvalue
2) Pyridine	4.03	79	333818	6.50 ppb	m✓	70
3) N-Nitrosodimethylamine	3.97	74	188288	5.17 ppb	m✓	100
5) Aniline	8.72	93	453603	4.71 ppb	#	34
7) Phenol	8.81	94	536035	6.01 ppb	#	28
8) bis(2-Chloroethyl)ether	8.89	63	322682	4.71 ppb	m✓	4
9) 2-Chlorophenol	8.95	128	421879	5.47 ppb		96
10) 1,3-Dichlorobenzene	9.26	146	364453	4.83 ppb		98
11) 1,4-Dichlorobenzene	9.41	146	407374	4.93 ppb	#	87
12) 1,2-Dichlorobenzene	9.91	146	366899	5.10 ppb		98
13) Benzyl Alcohol	9.94	108	266000	5.95 ppb		92
14) 2-Methylphenol	10.38	108	362895	6.46 ppb		97
15) Bis(2-chloroisopropyl) eth	10.35	45	410874	6.78 ppb	#	52
16) n-Nitroso-di-n-propylamine	10.76	70	253883	5.59 ppb	#	99
17) Hexachloroethane	10.74	117	152523	5.25 ppb		92
18) 3&4-Methylphenol	10.82	108	699707	12.27 ppb		95
19) Benzoic Acid	12.74	122	171705	5.13 ppb		93
22) Nitrobenzene	11.08	77	355743	4.82 ppb		95
23) Isophorone	11.78	82	701258	4.90 ppb		97
24) 2-Nitrophenol	12.02	139	217745	4.94 ppb	m✓	0
25) 2,4-Dimethylphenol	12.30	107	401574	5.48 ppb		99
26) bis(2-Chloroethoxy)methane	12.53	93	438478	5.29 ppb		100
27) 2,4-Dichlorophenol	12.74	162	309998	5.46 ppb		99
28) 1,2,4-Trichlorobenzene	12.92	180	267317	4.60 ppb		96
29) Naphthalene	13.06	128	1035182	5.57 ppb		97
30) 4-Chloroaniline	13.43	127	428494	5.25 ppb		96
31) Hexachlorobutadiene	13.67	225	142374	4.13 ppb		96
32) 4-Chloro-3-methylphenol	15.06	107	348434	5.62 ppb	#	34
33) 2-Methylnaphthalene	15.18	142	613063	5.24 ppb		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E30SEP98\ICAL5.D
Acq On : 30 Sep 98 9:38 am
Sample : 8270 Initial Cal 5 µg/ml S2,17,3
Misc : IS S2,16,6
Quant Time: Sep 30 15:32 1998

Vial: 4
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34)	1-Methylnaphthalene	15.50	142	592722	5.41	ppb		95
36)	Hexachlorocyclopentadiene	15.91	237	130789	3.47	ppb		100
37)	2,4,6-Trichlorophenol	16.23	196	210450	5.38	ppb		97
38)	2,4,5-Trichlorophenol	16.35	196	217621	5.23	ppb		95
40)	2-Chloronaphthalene	16.66	162	605899	5.59	ppb		95
41)	2-Nitroaniline	17.22	65	196576	5.27	ppb		94
42)	Dimethylphthalate	17.95	163	732822	5.33	ppb		98
43)	Acenaphthylene	17.95	152	969899	5.65	ppb		98
44)	2,6-Dinitrotoluene	18.12	165	144134	4.25	ppb	m	38
45)	3-Nitroaniline	18.55	138	146671	4.34	ppb	#	95
46)	Acenaphthene	18.55	153	595292	5.57	ppb		99
47)	2,4-Dinitrophenol	18.85	184	66636	2.88	ppb	#	28
48)	4-Nitrophenol	19.29	109	86068	4.33	ppb	#	23
49)	Dibenzofuran	19.06	168	798721	5.38	ppb		97
50)	2,4-Dinitrotoluene	19.31	165	210483	4.42	ppb	#	83
51)	Diethylphthalate	20.17	149	824567	5.96	ppb		99
52)	Fluorene	20.13	166	663908	5.54	ppb		99
53)	4-Chlorophenyl-phenylether	20.23	204	309638	5.25	ppb		96
54)	4-Nitroaniline	20.47	138	151720	4.66	ppb	#	82
56)	4,6-Dinitro-2-methylphenol	20.56	198	112487	4.13	ppb	#	38
57)	n-Nitrosodiphenylamine	20.65	169	454785	5.82	ppb		98
58)	1,2-Diphenylhydrazine	20.69	77	1525837	6.10	ppb		94
60)	4-Bromophenyl-phenylether	21.72	248	164968	4.64	ppb		94
61)	Hexachlorobenzene	22.10	284	171561	4.19	ppb	#	89
62)	Pentachlorophenol	22.74	266	134193	4.84	ppb		97
63)	Phenanthrene	23.11	178	914242	5.55	ppb		99
64)	Anthracene	23.23	178	900195	5.64	ppb		99
65)	Carbazole	23.86	167	771625	5.42	ppb		97
66)	Di-n-butylphthalate	25.28	149	1430826	5.79	ppb		99
67)	Fluoranthene	26.83	202	980016	5.40	ppb	#	93
70)	Pyrene	27.51	202	991440	5.79	ppb	#	89
72)	Butylbenzylphthalate	29.92	149	692907	6.65	ppb		94
73)	Benzo[a]anthracene	31.30	228	904687	5.62	ppb		98
74)	3,3'-Dichlorobenzidine	31.41	252	198116	3.68	ppb	#	92
75)	Chrysene	31.44	228	832444	5.48	ppb		97
76)	bis(2-Ethylhexyl)phthalate	31.83	149	1095235	7.48	ppb	#	95
78)	Di-n-octylphthalate	33.81	149	1561184	6.35	ppb		100
79)	Benzo[b]fluoranthene	34.91	252	933241	5.50	ppb		94
80)	Benzo[k]fluoranthene	34.99	252	740681	5.52	ppb		92
81)	Benzo[a]pyrene	36.20	252	732723	5.29	ppb	#	95
82)	Indeno[1,2,3-cd]pyrene	41.73	276	680292	4.67	ppb	#	78
83)	Dibenz[a,h]anthracene	41.87	278	615829	4.63	ppb	#	91
84)	Benzo[g,h,i]perylene	42.84	276	676985	4.84	ppb	#	90

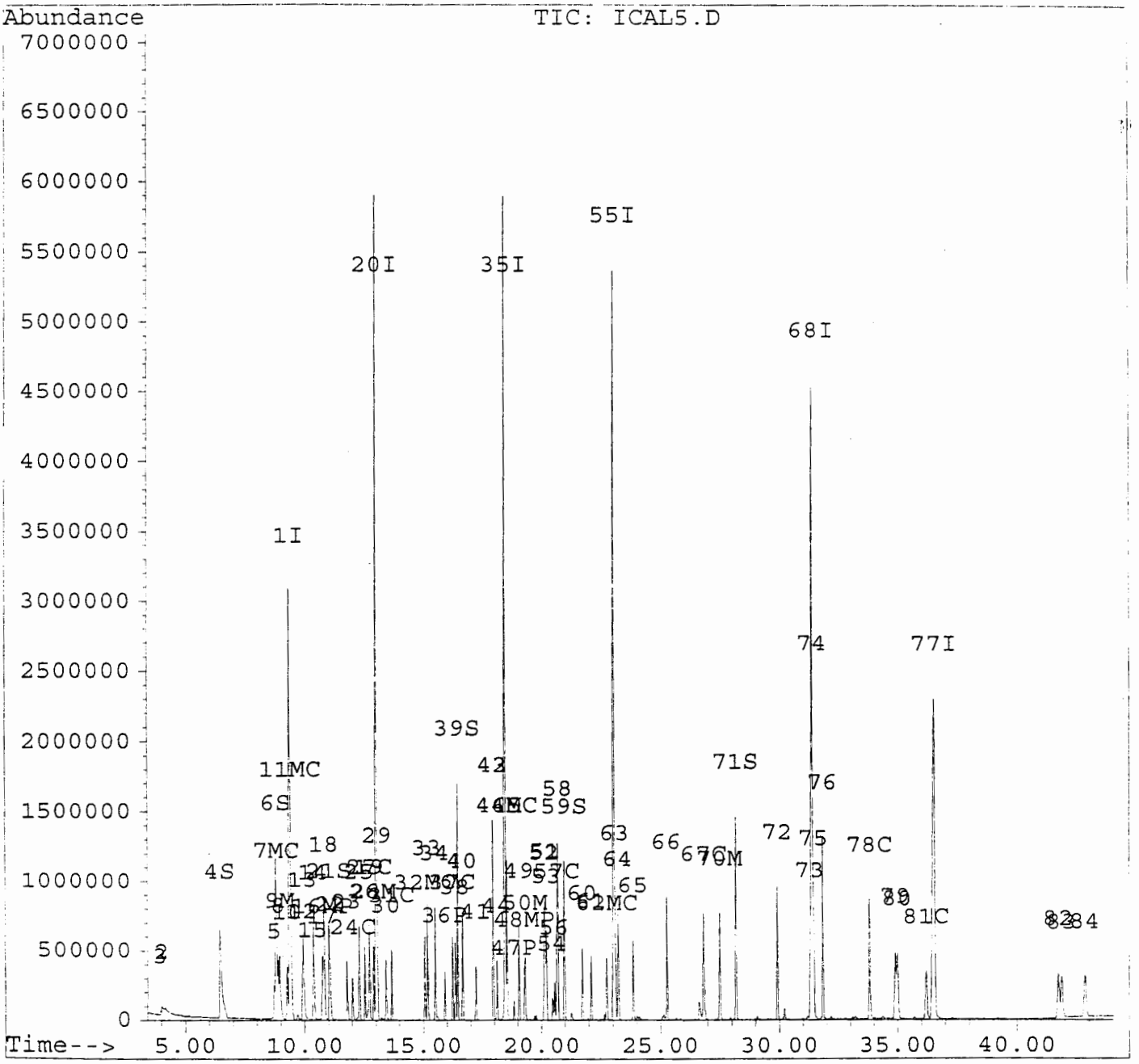
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E30SEP98\ICAL5.D
Acq On : 30 Sep 98 9:38 am
Sample : 8270 Initial Cal 5 µg/ml S2,17,3
Misc : IS S2,16,6
Quant Time: Sep 30 15:32 1998

Vial: 4
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\E30SEP98\ICAL20.D
Acq On : 30 Sep 98 10:30 am
Sample : 8270 Initial Cal 20 µg/ml S2,17,3
Misc : IS S2,16,6
Quant Time: Sep 30 15:32 1998

Vial: 5
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.37	152	2158757	40.00 ppb	0.00
20) Naphthalene-d8	13.02	136	7798143	40.00 ppb	0.00
35) Acenaphthene-d10	18.47	164	4062543	40.00 ppb	-0.01
55) Phenanthrene-d10	23.05	188	6983916	40.00 ppb	-0.02
68) Chyrsene-d12	31.39	240	5397844	40.00 ppb	-0.02
77) Perylene-d12	36.54	264	4840973	40.00 ppb	-0.03

System Monitoring Compounds					%Recovery
4) 2-Fluorophenol (s.s)	6.46	112	3552532	50.76 ppb	25.38%
6) Phenol-d5 (s.s)	8.79	99	4313312	53.20 ppb	26.60%
21) Nitrobenzene-d5 (s.s)	11.03	82	1812251	24.24 ppb	24.24%
39) 2-Fluorobiphenyl (s.s)	16.46	172	3168245	26.64 ppb	26.64%
59) 2,4,6-Tribromophenol (s.s)	20.99	330	854585	38.36 ppb	19.18%
71) Terphenyl-d14 (s.s)	28.20	244	3200561	27.03 ppb	27.03%

9-30-98

Target Compounds						Qvalue
2) Pyridine	3.92	79	1201739	24.05 ppb	m✓	92
3) N-Nitrosodimethylamine	3.93	74	841210	23.75 ppb	#	100
5) Aniline	8.70	93	2187899	23.34 ppb		90
7) Phenol	8.81	94	2031096	23.42 ppb	#	1
8) bis(2-Chloroethyl)ether	8.88	63	1454348	21.85 ppb	#	6
9) 2-Chlorophenol	8.94	128	1592778	21.24 ppb		97
10) 1,3-Dichlorobenzene	9.25	146	1518433	20.69 ppb		98
11) 1,4-Dichlorobenzene	9.40	146	1672133	20.80 ppb		94
12) 1,2-Dichlorobenzene	9.91	146	1512367	21.62 ppb		98
13) Benzyl Alcohol	9.94	108	994002	22.86 ppb		91
14) 2-Methylphenol	10.38	108	1366708	25.01 ppb		98
15) Bis(2-chloroisopropyl) eth	10.35	45	1615775	27.40 ppb	#	52
16) n-Nitroso-di-n-propylamine	10.75	70	1074072	24.32 ppb	#	99
17) Hexachloroethane	10.73	117	634739	22.46 ppb		93
18) 3&4-Methylphenol	10.83	108	2783908	50.22 ppb		100
19) Benzoic Acid	12.88	122	800534	24.62 ppb		98
22) Nitrobenzene	11.08	77	1481659	19.95 ppb		98
23) Isophorone	11.77	82	2985368	20.72 ppb		96
24) 2-Nitrophenol	12.02	139	884756	19.96 ppb	m✓	96
25) 2,4-Dimethylphenol	12.30	107	1551046	21.02 ppb		98
26) bis(2-Chloroethoxy)methane	12.54	93	1842121	22.09 ppb		99
27) 2,4-Dichlorophenol	12.74	162	1168441	20.47 ppb		99
28) 1,2,4-Trichlorobenzene	12.91	180	1153315	19.71 ppb		98
29) Naphthalene	13.07	128	4157496	22.22 ppb		99
30) 4-Chloroaniline	13.43	127	1787831	21.78 ppb		96
31) Hexachlorobutadiene	13.68	225	584601	16.84 ppb		97
32) 4-Chloro-3-methylphenol	15.07	107	1336715	21.41 ppb	#	35
33) 2-Methylnaphthalene	15.18	142	2616023	22.24 ppb		97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E30SEP98\ICAL20.D
Acq On : 30 Sep 98 10:30 am
Sample : 8270 Initial Cal 20 µg/ml S2,17,3
Misc : IS S2,16,6
Quant Time: Sep 30 15:32 1998

Vial: 5
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration

JM 9-30-98

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34)	1-Methylnaphthalene	15.50	142	2495856	22.66	ppb		96
36)	Hexachlorocyclopentadiene	15.91	237	605010	16.09	ppb		99
37)	2,4,6-Trichlorophenol	16.24	196	797230	20.43	ppb		99
38)	2,4,5-Trichlorophenol	16.35	196	870554	20.98	ppb		93
40)	2-Chloronaphthalene	16.67	162	2360178	21.86	ppb		96
41)	2-Nitroaniline	17.22	65	827639	22.24	ppb		96
42)	Dimethylphthalate	17.97	163	2973289	21.69	ppb		98
43)	Acenaphthylene	17.97	152	4006175	23.39	ppb		99
44)	2,6-Dinitrotoluene	18.14	165	693685	20.52	ppb		99
45)	3-Nitroaniline	18.55	138	778156	23.10	ppb		98
46)	Acenaphthene	18.56	153	2457807	23.07	ppb		99
47)	2,4-Dinitrophenol	18.85	184	374890	16.27	ppb	#	28
48)	4-Nitrophenol	19.30	109	382825	19.33	ppb	#	28
49)	Dibenzofuran	19.06	168	3412513	23.06	ppb		96
50)	2,4-Dinitrotoluene	19.33	165	1011108	21.28	ppb	#	83
51)	Diethylphthalate	20.19	149	3305101	23.94	ppb		99
52)	Fluorene	20.14	166	2841481	23.77	ppb		95
53)	4-Chlorophenyl-phenylether	20.23	204	1223843	20.80	ppb		97
54)	4-Nitroaniline	20.51	138	755178	23.26	ppb		96
56)	4,6-Dinitro-2-methylphenol	20.59	198	560192	20.05	ppb	#	38
57)	n-Nitrosodiphenylamine	20.68	169	1856519	23.14	ppb		97
58)	1,2-Diphenylhydrazine	20.72	77	6359078	24.76	ppb		95
60)	4-Bromophenyl-phenylether	21.73	248	679273	18.63	ppb		96
61)	Hexachlorobenzene	22.11	284	706409	16.81	ppb	#	89
62)	Pentachlorophenol	22.76	266	502921	17.68	ppb	m✓	99
63)	Phenanthrene	23.13	178	3808767	22.54	ppb		99
64)	Anthracene	23.25	178	3717027	22.69	ppb		100
65)	Carbazole	23.88	167	3209625	21.97	ppb		99
66)	Di-n-butylphthalate	25.29	149	5782826	22.81	ppb		99
67)	Fluoranthene	26.85	202	3882715	20.84	ppb	#	93
69)	Benzidine	27.44	184	1003539	23.14	ppb	#	97
70)	Pyrene	27.53	202	4190968	25.40	ppb	#	92
72)	Butylbenzylphthalate	29.93	149	2713595	27.01	ppb		95
73)	Benzo[a]anthracene	31.32	228	3549358	22.85	ppb		98
74)	3,3'-Dichlorobenzidine	31.42	252	1050575	20.25	ppb		98
75)	Chrysene	31.46	228	3221682	21.98	ppb		97
76)	bis(2-Ethylhexyl)phthalate	31.84	149	3845240	27.25	ppb	#	94
78)	Di-n-octylphthalate	33.82	149	6143022	26.30	ppb		99
79)	Benzo[b]fluoranthene	34.95	252	3358423	20.87	ppb	#	96
80)	Benzo[k]fluoranthene	35.03	252	3257156	25.59	ppb		97
81)	Benzo[a]pyrene	36.23	252	3041972	23.12	ppb	#	96
82)	Indeno[1,2,3-cd]pyrene	41.79	276	3030013	21.91	ppb	#	80
83)	Dibenz[a,h]anthracene	41.91	278	2721547	21.56	ppb	#	92
34)	Benzo[g,h,i]perylene	42.91	276	3056202	23.04	ppb	#	91

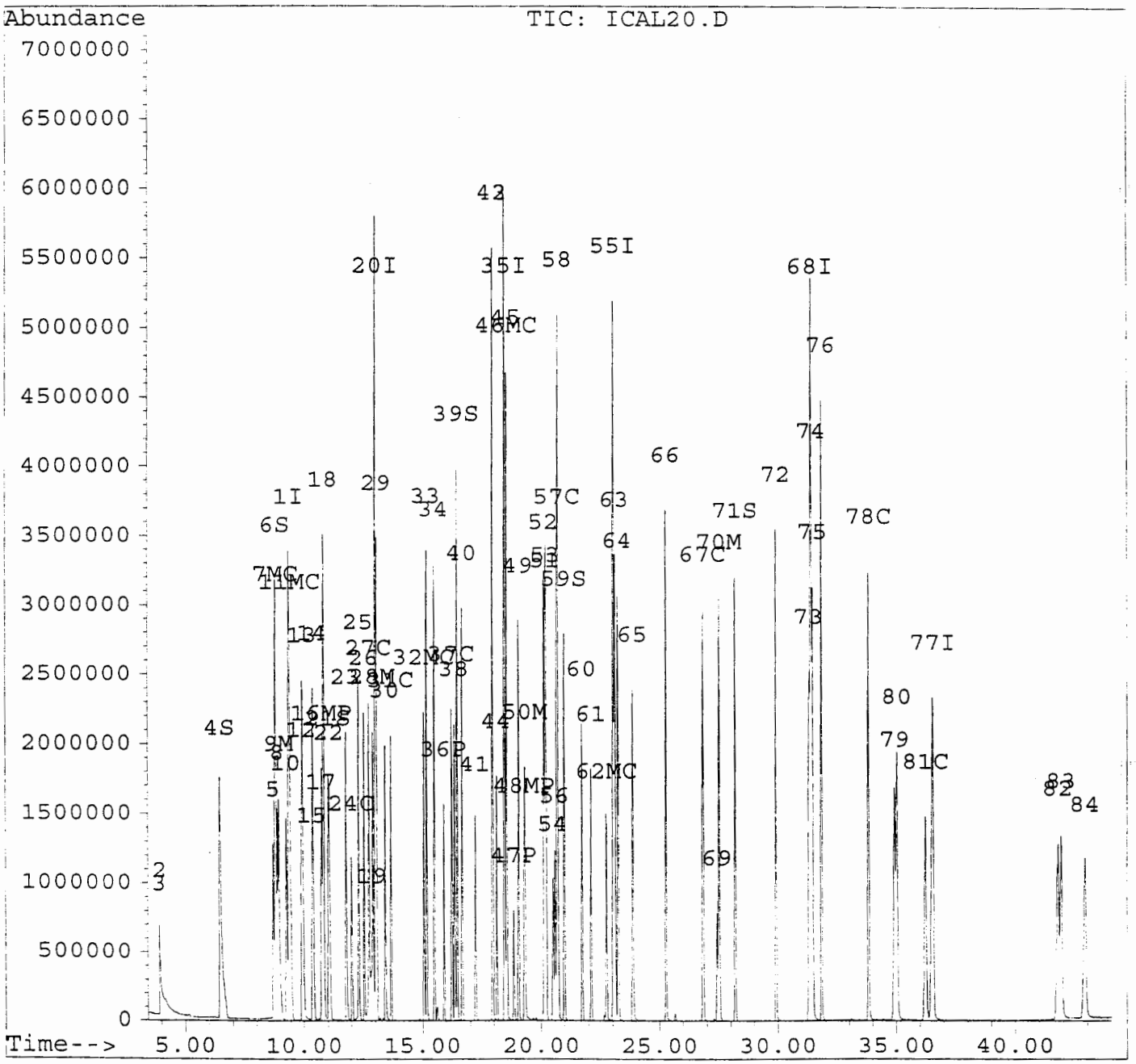
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E30SEP98\ICAL20.D
Acq On : 30 Sep 98 10:30 am
Sample : 8270 Initial Cal 20 µg/ml S2,17,3
Misc : IS S2,16,6
Quant Time: Sep 30 15:32 1998

Vial: 5
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\E30SEP98\ICAL50.D
Acq On : 30 Sep 98 11:28 am
Sample : 8270 Initial Cal 50 µg/ml S2,17,3
Misc : IS S2,16,6
Quant Time: Sep 30 14:59 1998

Vial: 6
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.38	152	2611267	40.00	ppb	0.01
20) Naphthalene-d8	13.04	136	9442215	40.00	ppb	0.02
35) Acenaphthene-d10	18.49	164	5161310	40.00	ppb	0.00
55) Phenanthrene-d10	23.09	188	8789051	40.00	ppb	0.02
68) Chyrsene-d12	31.43	240	6696421	40.00	ppb	0.03
77) Perylene-d12	36.61	264	6778401	40.00	ppb	0.04

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol (s.s)	6.47	112	17476800	206.42	ppb	103.21%
6) Phenol-d5 (s.s)	8.88	99	20961716	213.75	ppb	106.88%
21) Nitrobenzene-d5 (s.s)	11.07	82	9014923	99.59	ppb	99.59%
39) 2-Fluorobiphenyl (s.s)	16.51	172	14125012	93.49	ppb	93.49%
59) 2,4,6-Tribromophenol (s.s)	21.07	330	3820118	136.24	ppb	68.12%
71) Terphenyl-d14 (s.s)	28.27	244	14287500	97.28	ppb	97.28%

M 4-30-98

Target Compounds							Qvalue
2) Pyridine	3.92	79	3442474	56.96	ppb	m✓	93
3) N-Nitrosodimethylamine	3.94	74	2684469	62.65	ppb	#	100
5) Aniline	8.72	93	6869159	60.58	ppb		93
7) Phenol	8.90	94	5597234	53.35	ppb	#	28
8) bis(2-Chloroethyl)ether	8.95	63	4596063	57.09	ppb	#	1
9) 2-Chlorophenol	8.96	128	4806846	53.00	ppb		99
10) 1,3-Dichlorobenzene	9.26	146	4662785	52.52	ppb		98
11) 1,4-Dichlorobenzene	9.42	146	4931245	50.72	ppb		96
12) 1,2-Dichlorobenzene	9.92	146	4512656	53.34	ppb		98
13) Benzyl Alcohol	9.99	108	3079901	58.55	ppb		92
14) 2-Methylphenol	10.40	108	4151718	62.81	ppb		100
15) Bis(2-chloroisopropyl) eth	10.35	45	4777715	66.98	ppb	#	52
16) n-Nitroso-di-n-propylamine	10.83	70	2566482	48.04	ppb	#	98
17) Hexachloroethane	10.74	117	2030865	59.42	ppb		92
18) 3&4-Methylphenol	10.90	108	8141854	121.42	ppb		94
19) Benzoic Acid	13.14	122	2840325	72.21	ppb	#	1
22) Nitrobenzene	11.13	77	4628934	51.48	ppb		97
23) Isophorone	11.82	82	9636859	55.23	ppb		97
24) 2-Nitrophenol	12.03	139	2823730	52.62	ppb	m✓	96
25) 2,4-Dimethylphenol	12.36	107	4631444	51.85	ppb		97
26) bis(2-Chloroethoxy)methane	12.58	93	5710610	56.56	ppb		99
27) 2,4-Dichlorophenol	12.79	162	3508127	50.76	ppb		99
28) 1,2,4-Trichlorobenzene	12.95	180	3467206	48.95	ppb		99
29) Naphthalene	13.10	128	11838844	52.26	ppb		99
30) 4-Chloroaniline	13.46	127	5449477	54.82	ppb		97
31) Hexachlorobutadiene	13.69	225	1761055	41.89	ppb		98
32) 4-Chloro-3-methylphenol	15.09	107	4171255	55.19	ppb	#	34
33) 2-Methylnaphthalene	15.21	142	7832160	54.99	ppb		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E30SEP98\ICAL50.D
Acq On : 30 Sep 98 11:28 am
Sample : 8270 Initial Cal 50 µg/ml S2,17,3
Misc : IS S2,16,6
Quant Time: Sep 30 14:59 1998

Vial: 6
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration

9-30-98

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34)	1-Methylnaphthalene	15.53	142	7399603	55.49	ppb		93
36)	Hexachlorocyclopentadiene	15.92	237	1996614	41.80	ppb		98
37)	2,4,6-Trichlorophenol	16.26	196	2455132	49.52	ppb		98
38)	2,4,5-Trichlorophenol	16.39	196	2601962	49.35	ppb		92
40)	2-Chloronaphthalene	16.71	162	7229527	52.70	ppb		96
41)	2-Nitroaniline	17.28	65	2671644	56.52	ppb		94
42)	Dimethylphthalate	18.01	163	8734491	50.16	ppb		99
43)	Acenaphthylene	17.99	152	11464197	52.68	ppb		98
44)	2,6-Dinitrotoluene	18.19	165	2346069	54.63	ppb		97
45)	3-Nitroaniline	18.62	138	2412879	56.37	ppb		98
46)	Acenaphthene	18.60	153	7274726	53.74	ppb		94
47)	2,4-Dinitrophenol	18.90	184	1551560	53.01	ppb	#	28
48)	4-Nitrophenol	19.36	109	1396336	55.49	ppb	#	32
49)	Dibenzofuran	19.11	168	10145148	53.95	ppb		98
50)	2,4-Dinitrotoluene	19.39	165	3317252	54.96	ppb	#	82
51)	Diethylphthalate	20.27	149	9176398	52.33	ppb		99
52)	Fluorene	20.17	166	8221938	54.14	ppb		96
53)	4-Chlorophenyl-phenylether	20.26	204	3565749	47.70	ppb		99
54)	4-Nitroaniline	20.66	138	2678072	64.94	ppb		93
56)	4,6-Dinitro-2-methylphenol	20.71	198	1922985	54.69	ppb	#	38
57)	n-Nitrosodiphenylamine	20.76	169	5094982	50.46	ppb		93
58)	1,2-Diphenylhydrazine	20.78	77	18466795	57.15	ppb		95
60)	4-Bromophenyl-phenylether	21.77	248	2080729	45.36	ppb		95
61)	Hexachlorobenzene	22.15	284	2229601	42.16	ppb	#	90
62)	Pentachlorophenol	22.80	266	1667765	46.59	ppb	m	99
63)	Phenanthrene	23.16	178	11660411	54.84	ppb		99
64)	Anthracene	23.30	178	11333367	54.96	ppb		99
65)	Carbazole	23.92	167	10114168	55.01	ppb		97
66)	Di-n-butylphthalate	25.32	149	17471728	54.77	ppb		99
67)	Fluoranthene	26.89	202	11353279	48.42	ppb	#	92
69)	Benzidine	27.47	184	4423319	82.20	ppb	#	98
70)	Pyrene	27.57	202	12048673	58.87	ppb	#	91
72)	Butylbenzylphthalate	29.96	149	8267019	66.34	ppb		95
73)	Benzo[a]anthracene	31.36	228	11033137	57.25	ppb		98
74)	3,3'-Dichlorobenzidine	31.46	252	3406091	52.93	ppb		97
75)	Chrysene	31.54	228	9110333	50.11	ppb		93
76)	bis(2-Ethylhexyl)phthalate	31.87	149	11107691	63.44	ppb	#	95
78)	Di-n-octylphthalate	33.88	149	18760555	57.37	ppb		99
79)	Benzo[b]fluoranthene	35.02	252	11820047	52.45	ppb	m	92
80)	Benzo[k]fluoranthene	35.14	252	8947197	50.21	ppb	m	68
81)	Benzo[a]pyrene	36.34	252	10034366	54.48	ppb	#	95
82)	Indeno[1,2,3-cd]pyrene	41.90	276	10555937	54.51	ppb	#	78
83)	Dibenz[a,h]anthracene	42.08	278	8998901	50.92	ppb	#	92
84)	Benzo[g,h,i]perylene	43.08	276	9707702	52.27	ppb	#	88

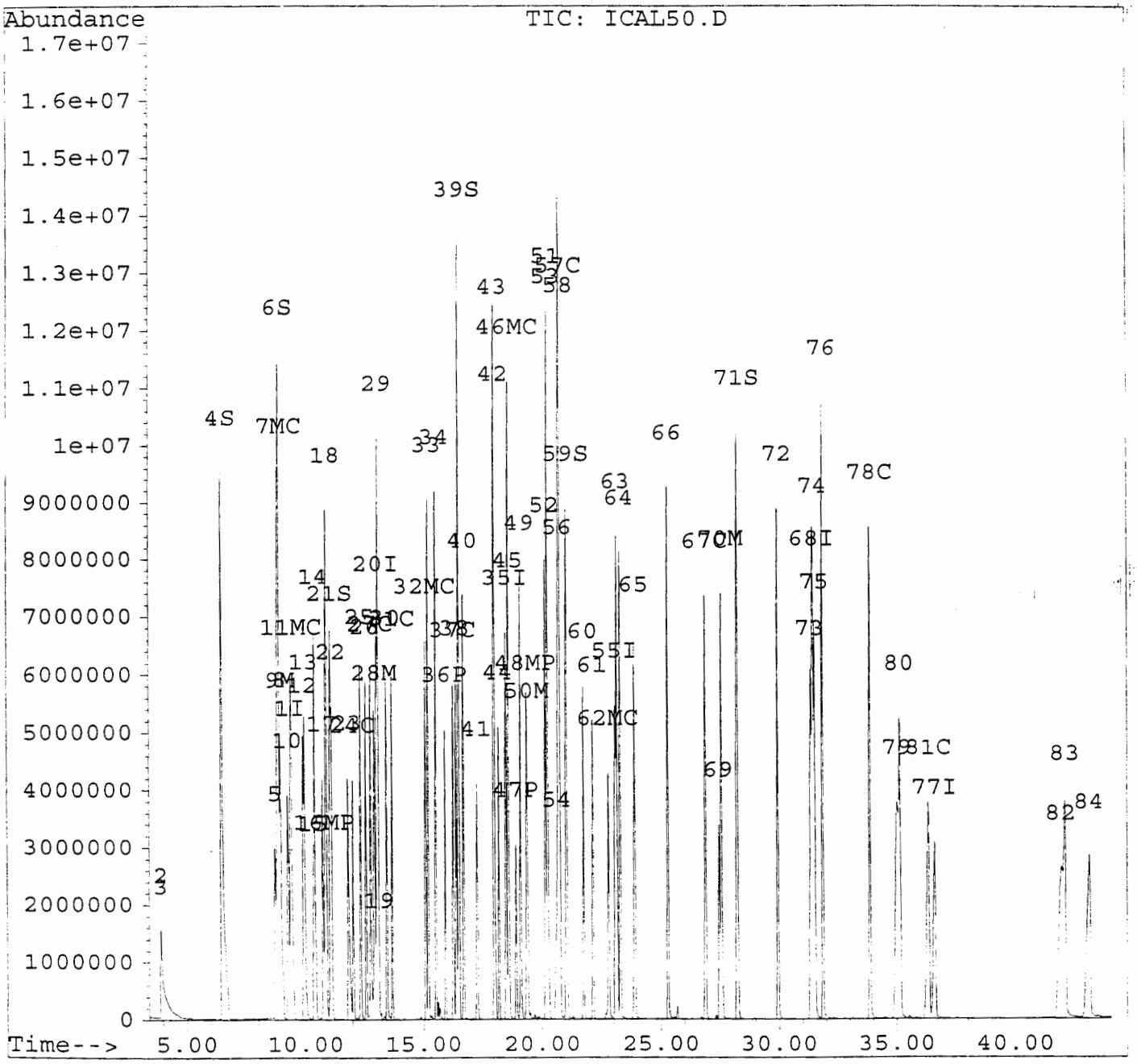
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E30SEP98\ICAL50.D
Acq On : 30 Sep 98 11:28 am
Sample : 8270 Initial Cal 50 µg/ml S2,17,3
Misc : IS S2,16,6
Quant Time: Sep 30 14:59 1998

Vial: 6
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\E30SEP98\ICAL80.D
Acq On : 30 Sep 98 12:37 pm
Sample : 8270 Initial Cal 80 µg/ml S2,17,3
Misc : IS S2,16,6
Quant Time: Sep 30 15:04 1998

Vial: 7
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.39	152	2494637	40.00	ppb	0.03
20) Naphthalene-d8	13.06	136	8920923	40.00	ppb	0.03
35) Acenaphthene-d10	18.49	164	4959040	40.00	ppb	0.01
55) Phenanthrene-d10	23.11	188	8684732	40.00	ppb	0.04
68) Chyrsene-d12	31.45	240	6870177	40.00	ppb	0.05
77) Perylene-d12	36.66	264	7100147	40.00	ppb	0.08

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol (s.s)	6.48	112	17404177	215.18	ppb	107.59%
6) Phenol-d5 (s.s)	8.89	99	20353423	217.25	ppb	108.63%
21) Nitrobenzene-d5 (s.s)	11.09	82	8782272	102.69	ppb	102.69%
39) 2-Fluorobiphenyl (s.s)	16.53	172	13687216	94.29	ppb	94.29%
59) 2,4,6-Tribromophenol (s.s)	21.08	330	3796591	137.03	ppb	68.51%
71) Terphenyl-d14 (s.s)	28.27	244	14576156	96.73	ppb	96.73%

TM 9-30-98

Target Compounds							Qvalue
2) Pyridine	3.91	79	4793394	83.02	ppb	m✓	93
3) N-Nitrosodimethylamine	3.94	74	4275811	104.45	ppb	#	100
5) Aniline	8.73	93	10249243	94.61	ppb		95
7) Phenol	8.92	94	8712395	86.92	ppb	#	28
8) bis(2-Chloroethyl)ether	8.94	63	6863140	89.24	ppb	#	8
9) 2-Chlorophenol	8.97	128	7183867	82.91	ppb	#	89
10) 1,3-Dichlorobenzene	9.27	146	7332658	86.46	ppb		96
11) 1,4-Dichlorobenzene	9.43	146	7449877	80.20	ppb		96
12) 1,2-Dichlorobenzene	9.92	146	6838773	84.61	ppb		97
13) Benzyl Alcohol	10.02	108	4764814	94.82	ppb		92
14) 2-Methylphenol	10.42	108	6047216	95.77	ppb		97
15) Bis(2-chloroisopropyl) eth	10.36	45	7019639	103.02	ppb	#	52
16) n-Nitroso-di-n-propylamine	10.97	70	4771900	93.49	ppb	m✓	93
17) Hexachloroethane	10.74	117	2998167	91.82	ppb		93
18) 3&4-Methylphenol	10.94	108	12079353	188.56	ppb		94
19) Benzoic Acid	13.28	122	4647432	123.67	ppb	m✓	1
22) Nitrobenzene	11.15	77	6965837	82.00	ppb		98
23) Isophorone	11.85	82	14749576	89.48	ppb		94
24) 2-Nitrophenol	12.04	139	4350004	85.80	ppb	m✓	95
25) 2,4-Dimethylphenol	12.39	107	7002196	82.97	ppb		97
26) bis(2-Chloroethoxy)methane	12.61	93	8506662	89.18	ppb		98
27) 2,4-Dichlorophenol	12.81	162	5211896	79.81	ppb		98
28) 1,2,4-Trichlorobenzene	12.95	180	5150780	76.96	ppb		98
29) Naphthalene	13.12	128	17078221	79.79	ppb		100
30) 4-Chloroaniline	13.48	127	8091978	86.16	ppb		98
31) Hexachlorobutadiene	13.69	225	2522711	63.52	ppb		100
32) 4-Chloro-3-methylphenol	15.12	107	6086509	85.23	ppb	#	34
33) 2-Methylnaphthalene	15.23	142	11162157	82.95	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E30SEP98\ICAL80.D
Acq On : 30 Sep 98 12:37 pm
Sample : 8270 Initial Cal 80 µg/ml S2,17,3
Misc : IS S2,16,6
Quant Time: Sep 30 15:04 1998

Vial: 7
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration

M 9-30-98

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34)	1-Methylnaphthalene	15.56	142	10642155	84.47	ppb		90
36)	Hexachlorocyclopentadiene	15.94	237	3027800	65.97	ppb		98
37)	2,4,6-Trichlorophenol	16.29	196	3665478	76.94	ppb		98
38)	2,4,5-Trichlorophenol	16.42	196	3812930	75.27	ppb		92
40)	2-Chloronaphthalene	16.73	162	10500078	79.66	ppb		96
41)	2-Nitroaniline	17.30	65	4028738	88.71	ppb		94
42)	Dimethylphthalate	18.05	163	13033947	77.90	ppb		98
43)	Acenaphthylene	18.01	152	16771849	80.21	ppb		98
44)	2,6-Dinitrotoluene	18.23	165	3542275	85.85	ppb		99
45)	3-Nitroaniline	18.65	138	3655048	88.87	ppb		99
46)	Acenaphthene	18.62	153	10643650	81.83	ppb		93
47)	2,4-Dinitrophenol	18.94	184	2570534	91.41	ppb	#	28
48)	4-Nitrophenol	19.41	109	2199999	90.99	ppb	#	32
49)	Dibenzofuran	19.13	168	14549985	80.54	ppb		100
50)	2,4-Dinitrotoluene	19.44	165	5028636	86.70	ppb	#	82
51)	Diethylphthalate	20.32	149	13517969	80.23	ppb		100
52)	Fluorene	20.20	166	12141318	83.21	ppb		95
53)	4-Chlorophenyl-phenylether	20.28	204	5297512	73.75	ppb		98
54)	4-Nitroaniline	20.75	138	3833818	96.76	ppb	#	80
56)	4,6-Dinitro-2-methylphenol	20.77	198	2600175	74.83	ppb	#	1
57)	n-Nitrosodiphenylamine	20.80	169	6968884	69.84	ppb		93
58)	1,2-Diphenylhydrazine	20.82	77	26737138	83.73	ppb	#	79
60)	4-Bromophenyl-phenylether	21.79	248	3161761	69.75	ppb		97
61)	Hexachlorobenzene	22.18	284	3226495	61.75	ppb	#	90
62)	Pentachlorophenol	22.83	266	2727611	77.11	ppb	m	96
63)	Phenanthrene	23.19	178	16853364	80.21	ppb		99
64)	Anthracene	23.33	178	16471278	80.84	ppb		99
65)	Carbazole	23.94	167	15328449	84.37	ppb		97
66)	Di-n-butylphthalate	25.34	149	24423233	77.48	ppb		98
67)	Fluoranthene	26.92	202	17629880	76.09	ppb	#	93
69)	Benzidine	27.50	184	6795874	123.10	ppb	#	97
70)	Pyrene	27.62	202	18096583	86.19	ppb	#	90
72)	Butylbenzylphthalate	30.00	149	12969142	101.44	ppb		93
73)	Benzo[a]anthracene	31.40	228	17345859	87.74	ppb		99
74)	3,3'-Dichlorobenzidine	31.51	252	5340970	80.89	ppb		98
75)	Chrysene	31.57	228	14209810	76.18	ppb		95
76)	bis(2-Ethylhexyl)phthalate	31.88	149	17069409	95.02	ppb		94
78)	Di-n-octylphthalate	33.92	149	29162547	85.14	ppb		98
79)	Benzo[b]fluoranthene	35.14	252	19200097	81.33	ppb	m	0
80)	Benzo[k]fluoranthene	35.21	252	14268700	76.45	ppb	m	61
81)	Benzo[a]pyrene	36.43	252	16315254	84.56	ppb	#	96
82)	Indeno[1,2,3-cd]pyrene	42.08	276	16795985	82.81	ppb	m	91
83)	Dibenz[a,h]anthracene	42.15	278	13643255	73.71	ppb	#	91
84)	Benzo[g,h,i]perylene	43.19	276	15025961	77.24	ppb	#	89

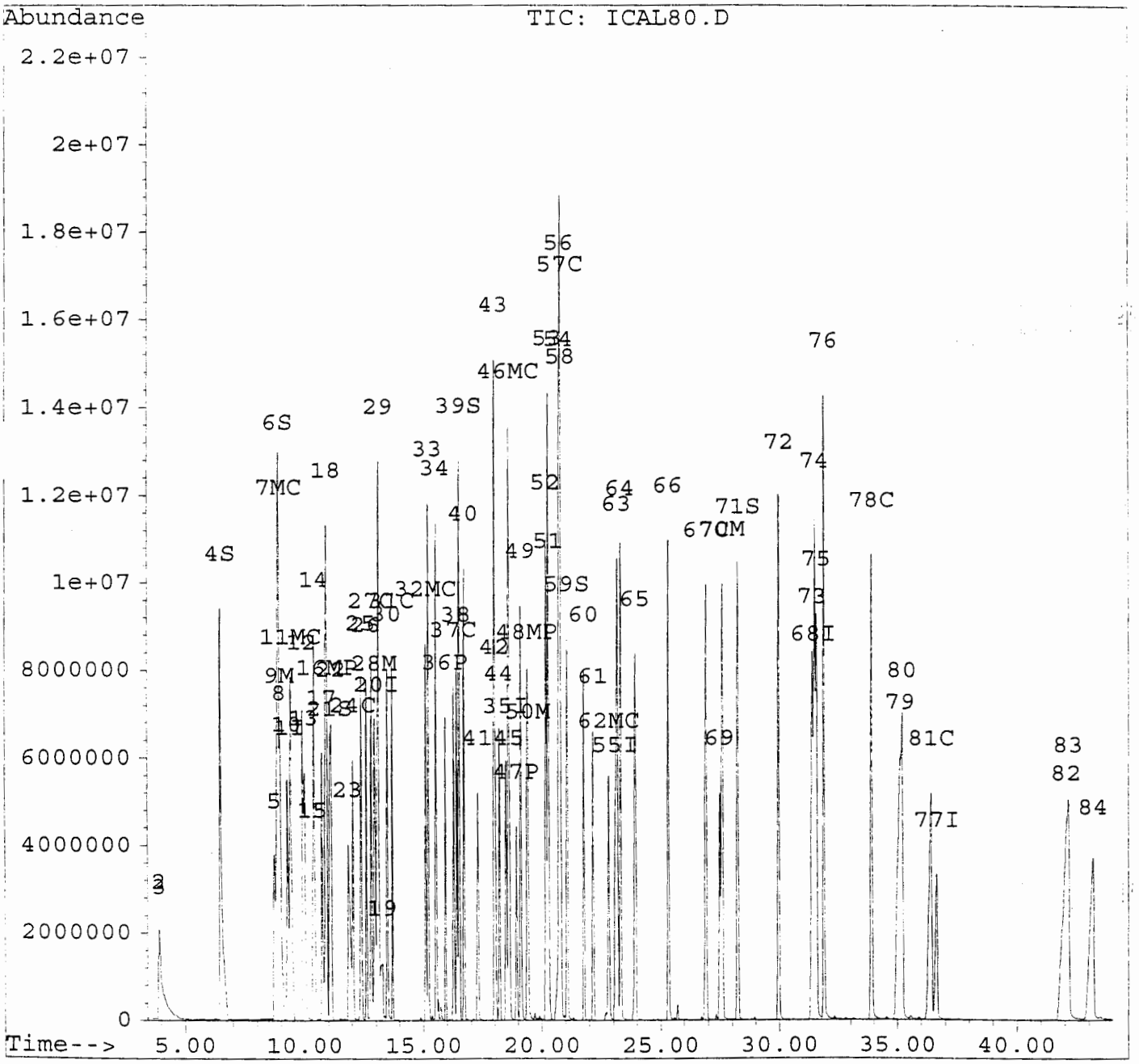
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E30SEP98\ICAL80.D
Acq On : 30 Sep 98 12:37 pm
Sample : 8270 Initial Cal 80 µg/ml S2,17,3
Misc : IS S2,16,6
Quant Time: Sep 30 15:04 1998

Vial: 7
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\E30SEP98\ICAL100.D
Acq On : 30 Sep 98 1:30 pm
Sample : 8270 Initial Cal 100 µg/ml S2,17,3
Misc : IS S2,16,6
Quant Time: Sep 30 15:19 1998

Vial: 8
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.39	152	2434219	40.00	ppb	0.02
20) Naphthalene-d8	13.07	136	9198427	40.00	ppb	0.04
35) Acenaphthene-d10	18.50	164	5008687	40.00	ppb	0.01
55) Phenanthrene-d10	23.13	188	8882016	40.00	ppb	0.06
68) Chyrsene-d12	31.46	240	6455279	40.00	ppb	0.05
77) Perylene-d12	36.67	264	6780348	40.00	ppb	0.09

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol (s.s)	6.49	112	20035726	253.86	ppb	126.93%
6) Phenol-d5 (s.s)	8.91	99	23621170	258.39	ppb	129.20%
21) Nitrobenzene-d5 (s.s)	11.11	82	10408861	118.04	ppb	118.04%
39) 2-Fluorobiphenyl (s.s)	16.54	172	16446190	112.17	ppb	112.17%
59) 2,4,6-Tribromophenol (s.s)	21.10	330	4359685	153.86	ppb	76.93%
71) Terphenyl-d14 (s.s)	28.28	244	16380113	115.69	ppb	115.69%

M 9-30-98

Target Compounds							Qvalue
2) Pyridine	3.90	79	6133670	108.88	ppb	m	93
3) N-Nitrosodimethylamine	3.94	74	5090282	127.44	ppb	#	100
5) Aniline	8.73	93	12116175	114.62	ppb		95
7) Phenol	8.94	94	10117776	103.45	ppb	#	28
8) bis(2-Chloroethyl)ether	8.95	63	8212502	109.44	ppb	#	7
9) 2-Chlorophenol	8.98	128	8621337	101.97	ppb	#	89
10) 1,3-Dichlorobenzene	9.27	146	8708080	105.23	ppb		97
11) 1,4-Dichlorobenzene	9.43	146	9092751	100.32	ppb		98
12) 1,2-Dichlorobenzene	9.92	146	8456968	107.22	ppb		96
13) Benzyl Alcohol	10.05	108	5866689	119.65	ppb		93
14) 2-Methylphenol	10.43	108	7401100	120.12	ppb		97
15) Bis(2-chloroisopropyl) eth	10.36	45	8456665	127.18	ppb	#	52
16) n-Nitroso-di-n-propylamine	11.00	70	5751462	115.48	ppb	m	99
17) Hexachloroethane	10.74	117	3723998	116.89	ppb		93
18) 3&4-Methylphenol	10.96	108	14795172	236.69	ppb		94
19) Benzoic Acid	13.35	122	5993542	163.45	ppb	m	1
22) Nitrobenzene	11.17	77	8477048	96.78	ppb		97
23) Isophorone	11.88	82	18165880	106.88	ppb	m	97
24) 2-Nitrophenol	12.06	139	5463781	104.51	ppb	m	96
25) 2,4-Dimethylphenol	12.41	107	8872689	101.96	ppb		98
26) bis(2-Chloroethoxy)methane	12.63	93	10454814	106.30	ppb		98
27) 2,4-Dichlorophenol	12.83	162	6536721	97.08	ppb		98
28) 1,2,4-Trichlorobenzene	12.94	180	6450130	93.47	ppb		99
29) Naphthalene	13.13	128	20447834	92.65	ppb		99
30) 4-Chloroaniline	13.49	127	9897978	102.22	ppb		98
31) Hexachlorobutadiene	13.71	225	3098851	75.67	ppb		100
32) 4-Chloro-3-methylphenol	15.13	107	7529861	102.26	ppb	#	34
33) 2-Methylnaphthalene	15.24	142	13610270	98.09	ppb		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E30SEP98\ICAL100.D
Acq On : 30 Sep 98 1:30 pm
Sample : 8270 Initial Cal 100 µg/ml S2,17,3
Misc : IS S2,16,6
Quant Time: Sep 30 15:19 1998

Vial: 8
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration

M 9.30.98

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34)	1-Methylnaphthalene	15.56	142	12841468	98.85	ppb		88
36)	Hexachlorocyclopentadiene	15.94	237	3727661	80.41	ppb		97
37)	2,4,6-Trichlorophenol	16.30	196	4544802	94.45	ppb		97
38)	2,4,5-Trichlorophenol	16.43	196	4631280	90.52	ppb		93
40)	2-Chloronaphthalene	16.74	162	12691655	95.34	ppb		97
41)	2-Nitroaniline	17.32	65	5005775	109.13	ppb		94
42)	Dimethylphthalate	18.06	163	16001217	94.69	ppb		98
43)	Acenaphthylene	18.03	152	20343531	96.33	ppb		97
44)	2,6-Dinitrotoluene	18.25	165	4355300	104.51	ppb		99
45)	3-Nitroaniline	18.68	138	4508636	108.54	ppb		99
46)	Acenaphthene	18.62	153	12814772	97.55	ppb		94
47)	2,4-Dinitrophenol	18.96	184	3246515	114.31	ppb	#	28
48)	4-Nitrophenol	19.43	109	2790597	114.27	ppb	#	33
49)	Dibenzofuran	19.15	168	18519614	101.49	ppb		97
50)	2,4-Dinitrotoluene	19.47	165	6311870	107.75	ppb	#	81
51)	Diethylphthalate	20.34	149	16928978	99.47	ppb		99
52)	Fluorene	20.21	166	14773584	100.25	ppb		94
53)	4-Chlorophenyl-phenylether	20.30	204	6600185	90.98	ppb		99
54)	4-Nitroaniline	20.79	138	4366174	109.10	ppb	#	79
56)	4,6-Dinitro-2-methylphenol	20.81	198	3035927	85.43	ppb	#	1
57)	n-Nitrosodiphenylamine	20.83	169	8359823	81.92	ppb		93
58)	1,2-Diphenylhydrazine	20.84	77	32588338	99.79	ppb	#	51
60)	4-Bromophenyl-phenylether	21.80	248	3699443	79.80	ppb		93
61)	Hexachlorobenzene	22.18	284	3918579	73.33	ppb	#	90
62)	Pentachlorophenol	22.83	266	3239567	89.55	ppb		98
63)	Phenanthrene	23.21	178	20787289	96.74	ppb		100
64)	Anthracene	23.36	178	20043614	96.19	ppb		98
65)	Carbazole	23.96	167	19172493	103.19	ppb		98
66)	Di-n-butylphthalate	25.36	149	28287273	87.74	ppb		97
67)	Fluoranthene	26.94	202	21609134	91.20	ppb	#	93
69)	Benzidine	27.50	184	8295806	159.93	ppb	#	98
70)	Pyrene	27.63	202	22011197	111.57	ppb	#	90
72)	Butylbenzylphthalate	30.00	149	15345321	127.74	ppb		93
73)	Benzo[a]anthracene	31.41	228	20135774	108.39	ppb		97
74)	3,3'-Dichlorobenzidine	31.52	252	6162671	99.34	ppb		96
75)	Chrysene	31.59	228	16249964	92.71	ppb		94
76)	bis(2-Ethylhexyl)phthalate	31.90	149	19922001	118.03	ppb	#	94
78)	Di-n-octylphthalate	33.92	149	34286260	104.82	ppb		98
79)	Benzo[b]fluoranthene	35.15	252	26208574	116.26	ppb	m	0
80)	Benzo[k]fluoranthene	35.25	252	15088489	84.65	ppb	m	0
81)	Benzo[a]pyrene	36.44	252	19368079	105.12	ppb	#	68
82)	Indeno[1,2,3-cd]pyrene	42.10	276	21187974	109.39	ppb	m	56
83)	Dibenz[a,h]anthracene	42.20	278	16689648	94.42	ppb	#	91
84)	Benzo[g,h,i]perylene	43.24	276	18265010	98.31	ppb	m	52

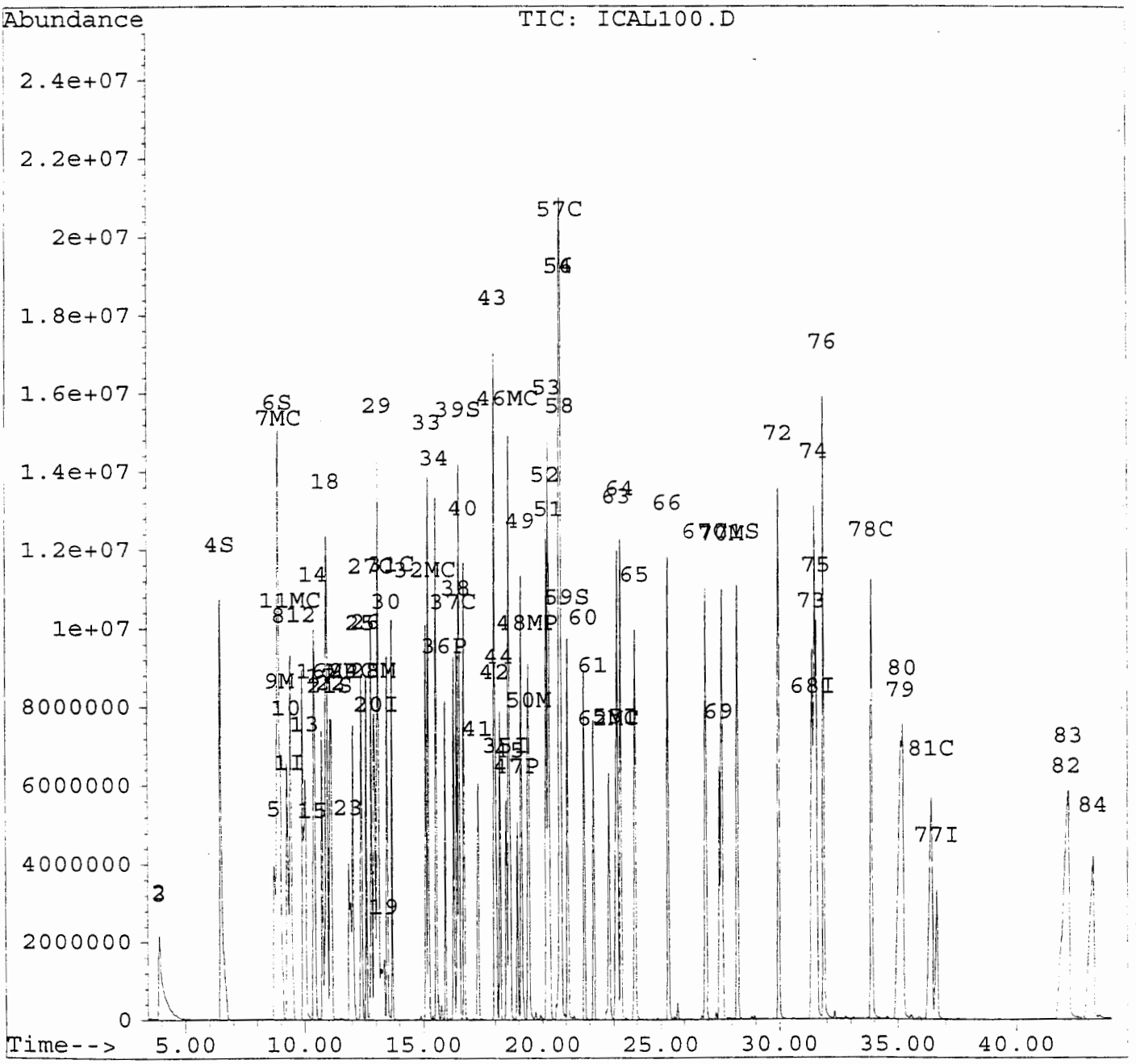
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E30SEP98\ICAL100.D
Acq On : 30 Sep 98 1:30 pm
Sample : 8270 Initial Cal 100 µg/ml S2,17,3
Misc : IS S2,16,6
Quant Time: Sep 30 15:19 1998

Vial: 8
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\E30SEP98\ICAL120.D Vial: 9
Acq On : 30 Sep 98 2:22 pm Operator: TMJ
Sample : 8270 Initial Cal 120 µg/ml S2,17,3 Inst : INST-E
Misc : IS S2,16,6 Multiplr: 1.00
Quant Time: Sep 30 15:23 1998

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.39	152	2256553	40.00 ppb	0.02
20) Naphthalene-d8	13.07	136	8764847	40.00 ppb	0.05
35) Acenaphthene-d10	18.51	164	4971799	40.00 ppb	0.03
55) Phenanthrene-d10	23.13	188	8613324	40.00 ppb	0.06
68) Chyrsene-d12	31.48	240	6220488	40.00 ppb	0.07
77) Perylene-d12	36.69	264	6309205	40.00 ppb	0.11

System Monitoring Compounds					%Recovery
4) 2-Fluorophenol (s.s)	6.50	112	23835550	325.78 ppb	162.89%
6) Phenol-d5 (s.s)	8.93	99	27587252	325.54 ppb	162.77%
21) Nitrobenzene-d5 (s.s)	11.13	82	12548912	149.35 ppb	149.35%
39) 2-Fluorobiphenyl (s.s)	16.55	172	19445291	133.61 ppb	133.61%
59) 2,4,6-Tribromophenol (s.s)	21.13	330	5124489	186.49 ppb	93.24%
71) Terphenyl-d14 (s.s)	28.30	244	20042149	146.90 ppb	146.90%

JM 9-30-98

Target Compounds						Qvalue
2) Pyridine	3.89	79	6531571	125.07 ppb	m	57
3) N-Nitrosodimethylamine	3.94	74	5868871	158.50 ppb	#	100
5) Aniline	8.72	93	13445960	137.21 ppb		98
7) Phenol	8.96	94	11359130	125.28 ppb	#	28
8) bis(2-Chloroethyl)ether	8.96	63	8875682	127.59 ppb	m	10
9) 2-Chlorophenol	8.99	128	9683158	123.54 ppb	#	90
10) 1,3-Dichlorobenzene	9.27	146	9735266	126.90 ppb		98
11) 1,4-Dichlorobenzene	9.43	146	10298580	122.57 ppb		97
12) 1,2-Dichlorobenzene	9.93	146	9380862	128.30 ppb		99
13) Benzyl Alcohol	10.08	108	6795607	149.50 ppb		93
14) 2-Methylphenol	10.46	108	8566704	149.99 ppb		95
15) Bis(2-chloroisopropyl) eth	10.37	45	9564801	155.18 ppb	#	52
16) n-Nitroso-di-n-propylamine	11.02	70	6702602	145.17 ppb	m	94
17) Hexachloroethane	10.75	117	4273104	144.68 ppb		91
18) 3&4-Methylphenol	10.98	108	17347372	299.37 ppb	m	94
19) Benzoic Acid	13.43	122	7071658	208.03 ppb	m	1
22) Nitrobenzene	11.18	77	9738824	116.68 ppb		98
23) Isophorone	11.90	82	20946573	129.33 ppb	m	99
24) 2-Nitrophenol	12.07	139	6376702	128.01 ppb	m	49
25) 2,4-Dimethylphenol	12.44	107	10141776	122.31 ppb		98
26) bis(2-Chloroethoxy)methane	12.64	93	12128310	129.42 ppb		99
27) 2,4-Dichlorophenol	12.84	162	7387402	115.14 ppb		99
28) 1,2,4-Trichlorobenzene	12.95	180	7369766	112.08 ppb		98
29) Naphthalene	13.14	128	22535045	107.16 ppb		98
30) 4-Chloroaniline	13.50	127	11446934	124.06 ppb		98
31) Hexachlorobutadiene	13.71	225	3550958	91.00 ppb		99
32) 4-Chloro-3-methylphenol	15.13	107	8842425	126.03 ppb	#	34
33) 2-Methylnaphthalene	15.25	142	15496583	117.21 ppb		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E30SEP98\ICAL120.D
Acq On : 30 Sep 98 2:22 pm
Sample : 8270 Initial Cal 120 µg/ml S2,17,3
Misc : IS S2,16,6
Quant Time: Sep 30 15:23 1998

Vial: 9
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration

JM 9-30-98

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34)	1-Methylnaphthalene	15.58	142	15143165	122.34	ppb		91
36)	Hexachlorocyclopentadiene	15.94	237	4123504	89.61	ppb		99
37)	2,4,6-Trichlorophenol	16.31	196	5112422	107.04	ppb		99
38)	2,4,5-Trichlorophenol	16.44	196	5428875	106.90	ppb		90
40)	2-Chloronaphthalene	16.75	162	14596039	110.46	ppb		97
41)	2-Nitroaniline	17.34	65	5872509	128.97	ppb		94
42)	Dimethylphthalate	18.08	163	18743857	111.74	ppb		98
43)	Acenaphthylene	18.04	152	23005298	109.74	ppb		97
44)	2,6-Dinitrotoluene	18.26	165	5094417	123.15	ppb		97
45)	3-Nitroaniline	18.70	138	5182314	125.68	ppb		98
46)	Acenaphthene	18.64	153	15086188	115.69	ppb		92
47)	2,4-Dinitrophenol	18.99	184	3783129	134.19	ppb	#	28
48)	4-Nitrophenol	19.47	109	3253964	134.23	ppb	#	34
49)	Dibenzofuran	19.16	168	21012252	116.01	ppb		99
50)	2,4-Dinitrotoluene	19.49	165	7370972	126.77	ppb	#	81
51)	Diethylphthalate	20.36	149	20342016	120.42	ppb		99
52)	Fluorene	20.22	166	17114882	116.99	ppb		94
53)	4-Chlorophenyl-phenylether	20.30	204	7741116	107.50	ppb		97
54)	4-Nitroaniline	20.82	138	4558511	114.75	ppb	#	76
56)	4,6-Dinitro-2-methylphenol	20.84	198	3268350	94.84	ppb	#	1
57)	n-Nitrosodiphenylamine	20.84	169	9323332	94.22	ppb		92
58)	1,2-Diphenylhydrazine	20.85	77	37703960	119.06	ppb	m	87
60)	4-Bromophenyl-phenylether	21.80	248	4421192	98.34	ppb		95
61)	Hexachlorobenzene	22.21	284	4532050	87.45	ppb	#	89
62)	Pentachlorophenol	22.85	266	3893619	110.99	ppb	m	98
63)	Phenanthrene	23.22	178	24517774	117.65	ppb		99
64)	Anthracene	23.37	178	23506432	116.33	ppb		99
65)	Carbazole	23.98	167	22781512	126.44	ppb		98
66)	Di-n-butylphthalate	25.36	149	31834530	101.83	ppb		96
67)	Fluoranthene	26.95	202	25118926	109.32	ppb	#	92
69)	Benzidine	27.52	184	9694109	193.94	ppb	#	97
70)	Pyrene	27.65	202	25800411	135.71	ppb	#	89
72)	Butylbenzylphthalate	30.01	149	18155024	156.83	ppb		93
73)	Benzo[a]anthracene	31.42	228	24083335	134.54	ppb		99
74)	3,3'-Dichlorobenzidine	31.55	252	6941675	116.12	ppb		93
75)	Chrysene	31.61	228	18904842	111.93	ppb		95
76)	bis(2-Ethylhexyl)phthalate	31.90	149	22826901	140.35	ppb		94
78)	Di-n-octylphthalate	33.95	149	38505805	126.51	ppb		97
79)	Benzo[b]fluoranthene	35.17	252	24244070	115.57	ppb	m	0
80)	Benzo[k]fluoranthene	35.20	252	21195364	127.80	ppb	m	0
81)	Benzo[a]pyrene	36.48	252	22148383	129.18	ppb	#	95
82)	Indeno[1,2,3-cd]pyrene	42.17	276	24843760	137.84	ppb	m	56
83)	Dibenz[a,h]anthracene	42.26	278	18716572	113.79	ppb	#	89
84)	Benzo[g,h,i]perylene	43.28	276	20900644	120.90	ppb	#	89

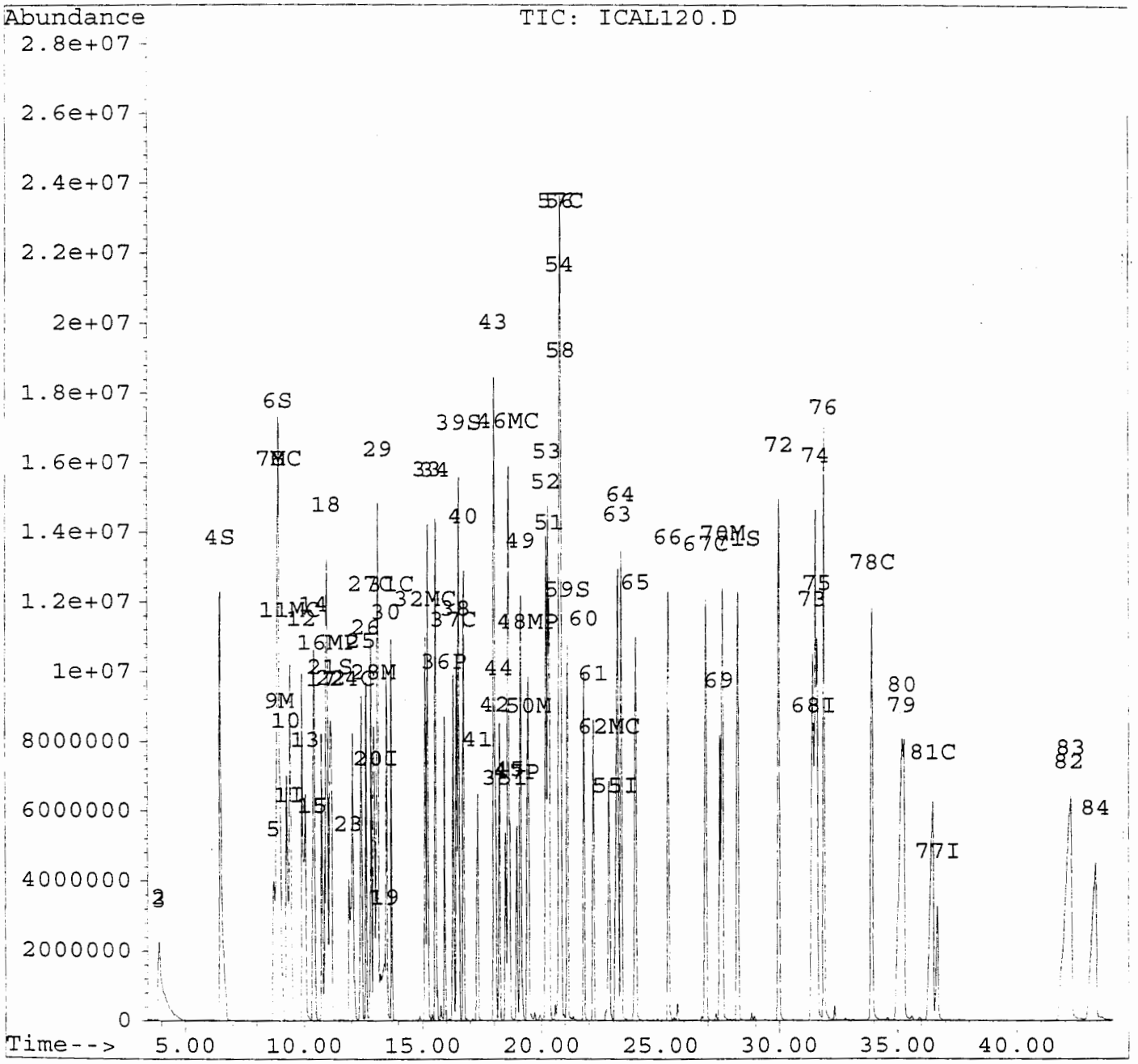
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E30SEP98\ICAL120.D
Acq On : 30 Sep 98 2:22 pm
Sample : 8270 Initial Cal 120 µg/ml S2,17,3
Misc : IS S2,16,6
Quant Time: Sep 30 15:23 1998

Vial: 9
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\E01OCT98\10CC01A.D Vial: 2
Acq On : 1 Oct 98 8:50 am Operator: TMJ
Sample : 8270 Cont Cal 50 µg/ml S2,17,1 Inst : INST-E
Misc : IS S2,16,6 Multiplr: 1.00
Quant Time: Oct 1 16:33 1998

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Thu Oct 01 16:31:34 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.36	152	2149626	40.00	ppb	0.00
20) Naphthalene-d8	13.01	136	8042358	40.00	ppb	-0.01
35) Acenaphthene-d10	18.46	164	4472167	40.00	ppb	-0.03
55) Phenanthrene-d10	23.06	188	8044533	40.00	ppb	-0.01
68) Chyrsene-d12	31.41	240	6206594	40.00	ppb	0.00
77) Perylene-d12	36.58	264	6560121	40.00	ppb	0.00

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol (s.s)	6.48	112	13272459	184.26	ppb	92.13%
6) Phenol-d5 (s.s)	8.88	99	16147695	188.12	ppb	94.06%
21) Nitrobenzene-d5 (s.s)	11.05	82	7847154	103.50	ppb	103.50%
39) 2-Fluorobiphenyl (s.s)	16.49	172	11782971	91.50	ppb	91.50%
59) 2,4,6-Tribromophenol (s.s)	21.04	330	3509930	195.47	ppb	97.73%
71) Terphenyl-d14 (s.s)	28.23	244	13098190	94.76	ppb	94.76%

NM 10-2-98

Target Compounds							Qvalue
2) Pyridine	3.92	79	2745997	48.63	ppb	m	93
3) N-Nitrosodimethylamine	3.94	74	2324181	53.61	ppb	#	100
5) Aniline	8.70	93	5951493	56.32	ppb		99
7) Phenol	8.90	94	4530451	47.65	ppb	#	1
8) bis(2-Chloroethyl)ether	8.94	63	4049691	56.84	ppb	#	1
9) 2-Chlorophenol	8.95	128	4106076	52.36	ppb		96
10) 1,3-Dichlorobenzene	9.24	146	4131836	54.35	ppb		96
11) 1,4-Dichlorobenzene	9.40	146	4179774	51.64	ppb		97
12) 1,2-Dichlorobenzene	9.90	146	3654501	49.44	ppb		99
13) Benzyl Alcohol	9.98	108	2658384	51.65	ppb		95
14) 2-Methylphenol	10.40	108	3616966	53.56	ppb		99
15) Bis(2-chloroisopropyl) eth	10.33	45	4455481	57.50	ppb	#	52
16) n-Nitroso-di-n-propylamine	10.80	70	2702350	53.99	ppb	#	95
17) Hexachloroethane	10.71	117	1761945	54.58	ppb		91
18) 3&4-Methylphenol	10.89	108	7206721	107.21	ppb		97
19) Benzoic Acid	13.18	122	2460023	52.90	ppb	#	58
22) Nitrobenzene	11.10	77	3911762	51.45	ppb		95
23) Isophorone	11.81	82	8841186	55.91	ppb		96
24) 2-Nitrophenol	12.01	139	2697441	56.90	ppb		98
25) 2,4-Dimethylphenol	12.34	107	4236583	53.38	ppb		97
26) bis(2-Chloroethoxy)methane	12.55	93	4668360	49.73	ppb		99
27) 2,4-Dichlorophenol	12.77	162	3104567	52.22	ppb		98
28) 1,2,4-Trichlorobenzene	12.91	180	2998692	52.18	ppb		98
29) Naphthalene	13.07	128	10485629	53.57	ppb		100
30) 4-Chloroaniline	13.44	127	4650294	51.75	ppb		97
31) Hexachlorobutadiene	13.66	225	1642651	57.18	ppb		99
32) 4-Chloro-3-methylphenol	15.09	107	3829122	55.45	ppb	#	35
33) 2-Methylnaphthalene	15.18	142	6528706	51.62	ppb		100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E01OCT98\10CC01A.D
Acq On : 1 Oct 98 8:50 am
Sample : 8270 Cont Cal 50 µg/ml S2,17,1
Misc : IS S2,16,6
Quant Time: Oct 1 16:33 1998

Vial: 2
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Thu Oct 01 16:31:34 1998
Response via : Multiple Level Calibration

WM 10-2-98

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
34)	1-Methylnaphthalene	15.51	142	7078777	58.52	ppb		92
36)	Hexachlorocyclopentadiene	15.90	237	1475909	45.43	ppb		99
37)	2,4,6-Trichlorophenol	16.25	196	2225086	52.80	ppb		98
38)	2,4,5-Trichlorophenol	16.38	196	2370562	53.51	ppb		92
40)	2-Chloronaphthalene	16.68	162	6111914	50.28	ppb		97
41)	2-Nitroaniline	17.25	65	2543865	56.71	ppb		97
42)	Dimethylphthalate	17.99	163	8050287	53.30	ppb		99
43)	Acenaphthylene	17.97	152	9148679	46.71	ppb		99
44)	2,6-Dinitrotoluene	18.17	165	2177319	57.43	ppb		95
45)	3-Nitroaniline	18.59	138	2191762	55.45	ppb		98
46)	Acenaphthene	18.56	153	6139878	49.82	ppb		95
47)	2,4-Dinitrophenol	18.89	184	1706404	68.96	ppb	#	58
48)	4-Nitrophenol	19.37	109	1320462	57.30	ppb	#	31
49)	Dibenzofuran	19.07	168	9176887	53.67	ppb		99
50)	2,4-Dinitrotoluene	19.37	165	2891039	52.94	ppb	#	76
51)	Diethylphthalate	20.26	149	8572169	52.59	ppb		99
52)	Fluorene	20.15	166	7704448	54.92	ppb		97
53)	4-Chlorophenyl-phenylether	20.23	204	3175313	50.97	ppb		98
54)	4-Nitroaniline	20.65	138	2416463	61.01	ppb		89
56)	4,6-Dinitro-2-methylphenol	20.70	198	1946472	65.95	ppb	#	20
57)	n-Nitrosodiphenylamine	20.73	169	4605884	51.50	ppb		95
58)	1,2-Diphenylhydrazine	20.76	77	17439775	53.30	ppb	#	79
60)	4-Bromophenyl-phenylether	21.75	248	2030961	55.21	ppb		97
61)	Hexachlorobenzene	22.13	284	2054020	53.54	ppb	#	89
62)	Pentachlorophenol	22.79	266	1611352	52.99	ppb		99
63)	Phenanthrene	23.14	178	10561973	51.81	ppb		99
64)	Anthracene	23.28	178	10707882	54.01	ppb		99
65)	Carbazole	23.89	167	9257944	51.39	ppb		97
66)	Di-n-butylphthalate	25.30	149	16328655	55.11	ppb		99
67)	Fluoranthene	26.87	202	11107650	52.96	ppb	#	93
69)	Benzidine	27.43	184	3477502	46.15	ppb	#	97
70)	Pyrene	27.55	202	11412536	52.09	ppb	#	90
72)	Butylbenzylphthalate	29.94	149	8219740	54.32	ppb		93
73)	Benzo[a]anthracene	31.34	228	10745843	53.78	ppb		99
74)	3,3'-Dichlorobenzidine	31.44	252	3053919	53.15	ppb		94
75)	Chrysene	31.51	228	9575216	56.74	ppb		97
76)	bis(2-Ethylhexyl)phthalate	31.85	149	11067016	53.38	ppb		93
78)	Di-n-octylphthalate	33.86	149	19319803	53.10	ppb		99
79)	Benzo[b]fluoranthene	34.98	252	12199954	52.97	ppb	m✓	94
80)	Benzo[k]fluoranthene	35.12	252	8518409	47.38	ppb	m✓	0
81)	Benzo[a]pyrene	36.31	252	10533905	54.65	ppb	#	96
82)	Indeno[1,2,3-cd]pyrene	41.86	276	10294422	51.52	ppb	#	76
83)	Dibenz[a,h]anthracene	42.03	278	9176022	55.15	ppb	#	90
84)	Benzo[g,h,i]perylene	43.04	276	9392731	51.21	ppb	#	66

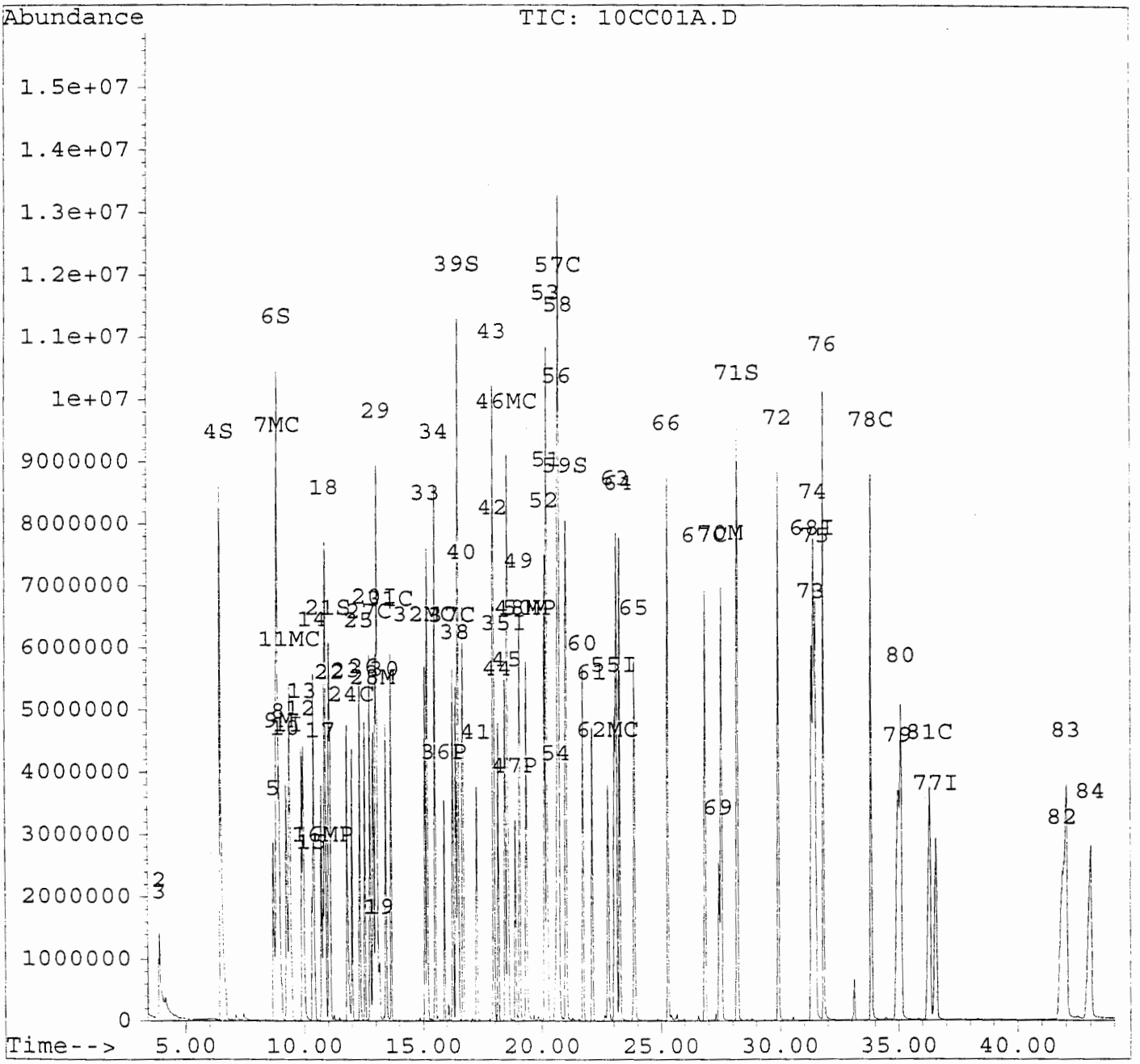
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E01OCT98\10CC01A.D
Acq On : 1 Oct 98 8:50 am
Sample : 8270 Cont Cal 50 µg/ml S2,17,1
Misc : IS S2,16,6
Quant Time: Oct 1 16:33 1998

Vial: 2
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Thu Oct 01 16:31:34 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\10CC01A.D
Acq On : 1 Oct 98 9:09 am
Sample : 8270 Continuing Cal Ck S2,17,1
Misc : IS:S2,16,6
Quant Time: Oct 2 10:58 1998

Vial: 2
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.27	152	1115584	40.00	ppb	-0.02
20) Naphthalene-d8	11.67	136	3924803	40.00	ppb	-0.03
35) Acenaphthene-d10	16.80	164	2478286	40.00	ppb	-0.03
55) Phenanthrene-d10	21.12	188	3482418	40.00	ppb	-0.03
68) Chyrsene-d12	29.00	240	2136788	40.00	ppb	-0.03
77) Perylene-d12	32.69	264	1484835	40.00	ppb	-0.03

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol (s.s.)	5.63	112	7919885	176.67	ppb	88.34%
6) Phenol-d5 (s.s)	7.78	99	9553491	195.41	ppb	97.70%
21) Nitrobenzene-d5 (s.s)	9.83	82	4175665	89.89	ppb	89.89%
39) 2-Fluorobiphenyl (s.s)	14.92	172	6738915	95.04	ppb	95.04%
59) 2,4,6-Tribromophenol (s.s)	19.23	330	1383812	219.88	ppb	109.94%
71) Terphenyl-d14 (s.s)	26.01	244	4662741	98.97	ppb	98.97%

M 10-2-98

Target Compounds							Qvalue
2) Pyridine	3.40	79	1546331	45.84	ppb	m	0
3) N-Nitrosodimethylamine	3.43	74	1140379	43.95	ppb	m	94
5) Aniline	7.63	93	2315626	46.86	ppb		97
7) Phenol	7.81	94	2710156	48.89	ppb		94
8) bis(2-Chloroethyl)ether	7.78	63	1470525	45.69	ppb	m	58
9) 2-Chlorophenol	7.92	128	1969665	49.99	ppb		92
10) 1,3-Dichlorobenzene	8.16	146	1894161	50.52	ppb		100
11) 1,4-Dichlorobenzene	8.30	146	2182504	52.18	ppb		99
12) 1,2-Dichlorobenzene	8.76	146	1843297	49.96	ppb		99
13) Benzyl alcohol	8.81	108	1534533	52.31	ppb		87
14) 2-Methylphenol	9.24	108	2158011	53.79	ppb		96
15) bis(2-Chloroisopropyl) eth	9.14	45	2677882	46.25	ppb	#	74
16) n-Nitroso-di-n-propylamine	9.56	70	1699641	51.74	ppb	#	86
17) Hexachloroethane	9.52	117	895094	49.07	ppb		89
18) 3&4-Methylphenol	9.68	108	4309370	110.19	ppb		99
19) Benzoic acid	11.80	122	1060462	42.66	ppb	m	47
22) Nitrobenzene	9.87	77	2083362	45.45	ppb	#	89
23) Isophorone	10.52	82	4525634	49.11	ppb		94
24) 2-Nitrophenol	10.74	139	1342250	56.04	ppb	#	84
25) 2,4-Dimethylphenol	11.04	107	2267483	50.58	ppb		88
26) bis(2-Chloroethoxy)methane	11.21	93	2361055	46.41	ppb		99
27) 2,4-Dichlorophenol	11.49	162	1657894	54.76	ppb		95
28) 1,2,4-Trichlorobenzene	11.58	180	1473980	50.23	ppb		97
29) Naphthalene	11.73	128	5001660	51.33	ppb		99
30) 4-Chloroaniline	12.08	127	1735932	48.76	ppb		97
31) Hexachlorobutadiene	12.27	225	905831	58.65	ppb		99
32) 4-Chloro-3-methylphenol	13.68	107	1899221	49.21	ppb	#	1

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\10CC01A.D
Acq On : 1 Oct 98 9:09 am
Sample : 8270 Continuing Cal Ck S2,17,1
Misc : IS:S2,16,6
Quant Time: Oct 2 10:58 1998

Vial: 2
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration

M 10-2-98

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
33)	2-Methylnaphthalene	13.71	142	3631382	55.70	ppb	m	82
34)	1-Methylnaphthalene	14.03	142	3514228	56.89	ppb		96
36)	Hexachlorocyclopentadiene	14.38	237	288917	24.33	ppb		99
37)	2,4,6-Trichlorophenol	14.75	196	865749	53.39	ppb		99
38)	2,4,5-Trichlorophenol	14.93	196	851590	50.23	ppb		99
40)	2-Chloronaphthalene	15.12	162	3106049	49.05	ppb		96
41)	2-Nitroaniline	15.68	65	1293580	47.75	ppb	#	80
42)	Dimethylphthalate	16.33	163	4283946	53.96	ppb	#	98
43)	Acenaphthylene	16.34	152	4468238	47.62	ppb		98
44)	2,6-Dinitrotoluene	16.53	165	1055735	52.94	ppb	#	78
45)	3-Nitroaniline	16.94	138	711970	58.21	ppb		84
46)	Acenaphthene	16.89	153	2869426	48.27	ppb		95
47)	2,4-Dinitrophenol	17.26	184	491929	49.67	ppb	#	33
48)	4-Nitrophenol	17.87	109	512922	41.44	ppb	m	81
49)	Dibenzofuran	17.37	168	4743508	51.38	ppb		89
50)	2,4-Dinitrotoluene	17.67	165	1374446	50.63	ppb	#	77
51)	Diethylphthalate	18.44	149	4061649	52.65	ppb	#	94
52)	Fluorene	18.39	166	3985004	52.57	ppb		96
53)	4-Chlorophenyl-phenylether	18.47	204	1461785	56.04	ppb	#	85
54)	4-Nitroaniline	18.80	138	678522	51.51	ppb	#	21
56)	4,6-Dinitro-2-methylphenol	18.88	198	651551	61.55	ppb	#	10
57)	n-Nitrosodiphenylamine	18.92	169	2540917	57.69	ppb		98
58)	1,2-Diphenylhydrazine	18.94	77	7963015	48.43	ppb		100
60)	4-Bromophenyl-phenylether	19.88	248	812884	57.11	ppb	#	76
61)	Hexachlorobenzene	20.25	284	775322	57.09	ppb	#	79
62)	Pentachlorophenol	20.89	266	443885	51.35	ppb		98
63)	Phenanthrene	21.20	178	4636905	50.71	ppb		98
64)	Anthracene	21.33	178	4380592	49.30	ppb		98
65)	Carbazole	21.93	167	2341942	48.17	ppb		97
66)	Di-n-butylphthalate	23.25	149	6303895	47.19	ppb		98
67)	Fluoranthene	24.72	202	4023614	48.44	ppb		100
69)	Benzidine	25.33	184	211485	38.98	ppb	m	93
70)	Pyrene	25.35	202	3797286	52.66	ppb		99
72)	Butylbenzylphthalate	27.66	149	3028268	56.85	ppb		94
73)	Benzo[a]anthracene	28.94	228	3371523	50.97	ppb		99
74)	3,3'-Dichlorobenzidine	29.06	252	752734	51.87	ppb	#	94
75)	Chrysene	29.08	228	2926002	50.30	ppb		98
76)	bis(2-Ethylhexyl)phthalate	29.47	149	3662618	53.90	ppb	#	93
78)	Di-n-octylphthalate	31.19	149	6433073	55.26	ppb		99
79)	Benzo[b]fluoranthene	31.89	252	2691123	46.16	ppb		99
80)	Benzo[k]fluoranthene	31.96	252	2299966	51.69	ppb		99
81)	Benzo[a]pyrene	32.57	252	2421417	51.56	ppb		99
82)	Indeno[1,2,3-cd]pyrene	34.97	276	2294402	53.50	ppb		93

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\10CC01A.D
Acq On : 1 Oct 98 9:09 am
Sample : 8270 Continuing Cal Ck S2,17,1
Misc : IS:S2,16,6
Quant Time: Oct 2 10:58 1998

Vial: 2
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration

M 10-7-98

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
83) Dibenz[a,h]anthracene	35.02	278	1926079	57.81 ppb	97
84) Benzo[g,h,i]perylene	35.61	276	1956244	54.64 ppb	99

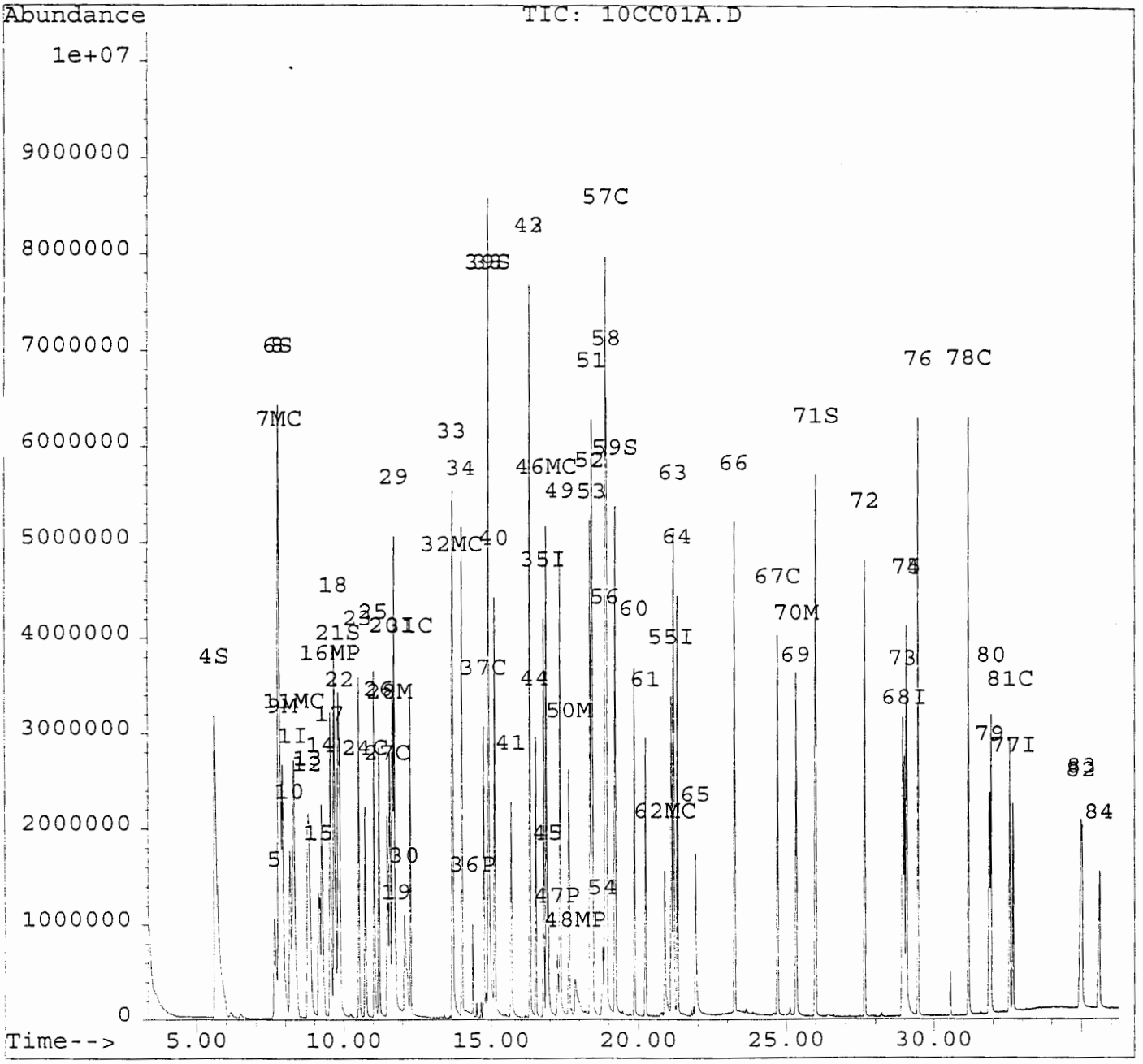
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\10CC01A.D
Acq On : 1 Oct 98 9:09 am
Sample : 8270 Continuing Cal Ck S2,17,1
Misc : IS:S2,16,6
Quant Time: Oct 2 10:58 1998

Vial: 2
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\LCB092W.D
Acq On : 1 Oct 98 9:53 am
Sample : Lab Control Blank 8270#092W
Misc : 9/28/98 1000/1 IS:S2,13,3
Quant Time: Oct 1 10:30 1998

Vial: 4
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.25	152	1070065	40.00 ppb	-0.04
20) Naphthalene-d8	11.66	136	3874001	40.00 ppb	-0.05
35) Acenaphthene-d10	16.79	164	2375374	40.00 ppb	-0.04
55) Phenanthrene-d10	21.11	188	3329556	40.00 ppb	-0.04
68) Chyrsene-d12	28.97	240	2063632	40.00 ppb	-0.06
77) Perylene-d12	32.68	264	1381162	40.00 ppb	-0.03
System Monitoring Compounds					**%Recovery**
4) 2-Fluorophenol (s.s.)	5.68	112	1864234	43.36 ppb	21.68%
6) Phenol-d5 (s.s)	7.81	99	1833605	39.10 ppb	19.55%
21) Nitrobenzene-d5 (s.s)	9.80	82	1978167	43.14 ppb	43.14%
39) 2-Fluorobiphenyl (s.s)	14.90	172	3825968	56.29 ppb	56.29%
59) 2,4,6-Tribromophenol (s.s)	19.21	330	1115422	185.37 ppb	92.68%
71) Terphenyl-d14 (s.s)	26.01	244	4507708	99.07 ppb	99.07%
arget Compounds					**Qvalue**
19) Benzoic acid	11.89	122	10302	0.43 ppb #	54
51) Diethylphthalate	18.40	149	25993	0.35 ppb	98
56) 4,6-Dinitro-2-methylphenol	19.20	198	3477	0.34 ppb #	1
66) Di-n-butylphthalate	23.23	149	62284	0.49 ppb #	95
72) Butylbenzylphthalate	27.63	149	24633	0.48 ppb	97
76) bis(2-Ethylhexyl)phthalate	29.44	149	53394	0.81 ppb	95

ND
M
10.2.98

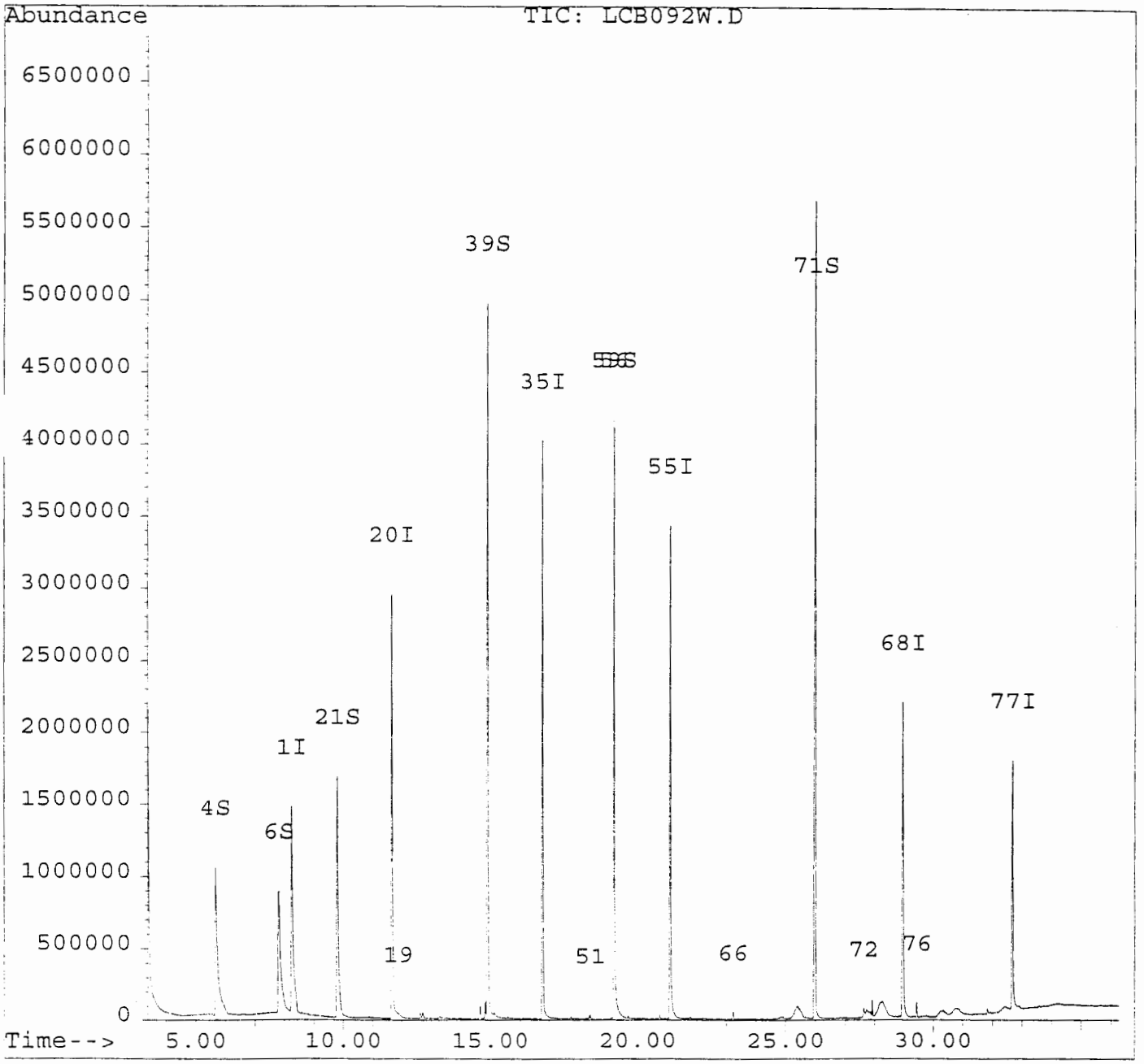
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\LCB092W.D
Acq On : 1 Oct 98 9:53 am
Sample : Lab Control Blank 8270#092W
Misc : 9/28/98 1000/1 IS:S2,13,3
Quant Time: Oct 1 10:30 1998

Vial: 4
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\E01OCT98\LCB093W.D
Acq On : 1 Oct 98 9:43 am
Sample : Lab Control Blank 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 1 10:28 1998

Vial: 4
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.33	152	1593396	40.00 ppb	-0.03
20) Naphthalene-d8	12.98	136	6508712	40.00 ppb	-0.04
35) Acenaphthene-d10	18.44	164	3679893	40.00 ppb	-0.04
55) Phenanthrene-d10	23.02	188	6410669	40.00 ppb	-0.05
68) Chyrsene-d12	31.35	240	5433189	40.00 ppb	-0.05
77) Perylene-d12	36.50	264	4854788	40.00 ppb	-0.08
System Monitoring Compounds					%Recovery
4) 2-Fluorophenol (s.s)	6.43	112	3608990	67.59 ppb	33.80%
6) Phenol-d5 (s.s)	8.78	99	3196714	50.24 ppb	25.12%
21) Nitrobenzene-d5 (s.s)	11.00	82	3717348	60.58 ppb	60.58%
39) 2-Fluorobiphenyl (s.s)	16.45	172	6347741	59.90 ppb	59.90%
59) 2,4,6-Tribromophenol (s.s)	20.98	330	2180602	152.39 ppb	76.19%
71) Terphenyl-d14 (s.s)	28.20	244	9463579	78.21 ppb	78.21%
Target Compounds					Qvalue
44) 2,6-Dinitrotoluene	18.44	165	488819	~~15.67~~ ppb	# 38

ND
JM 10-1-98

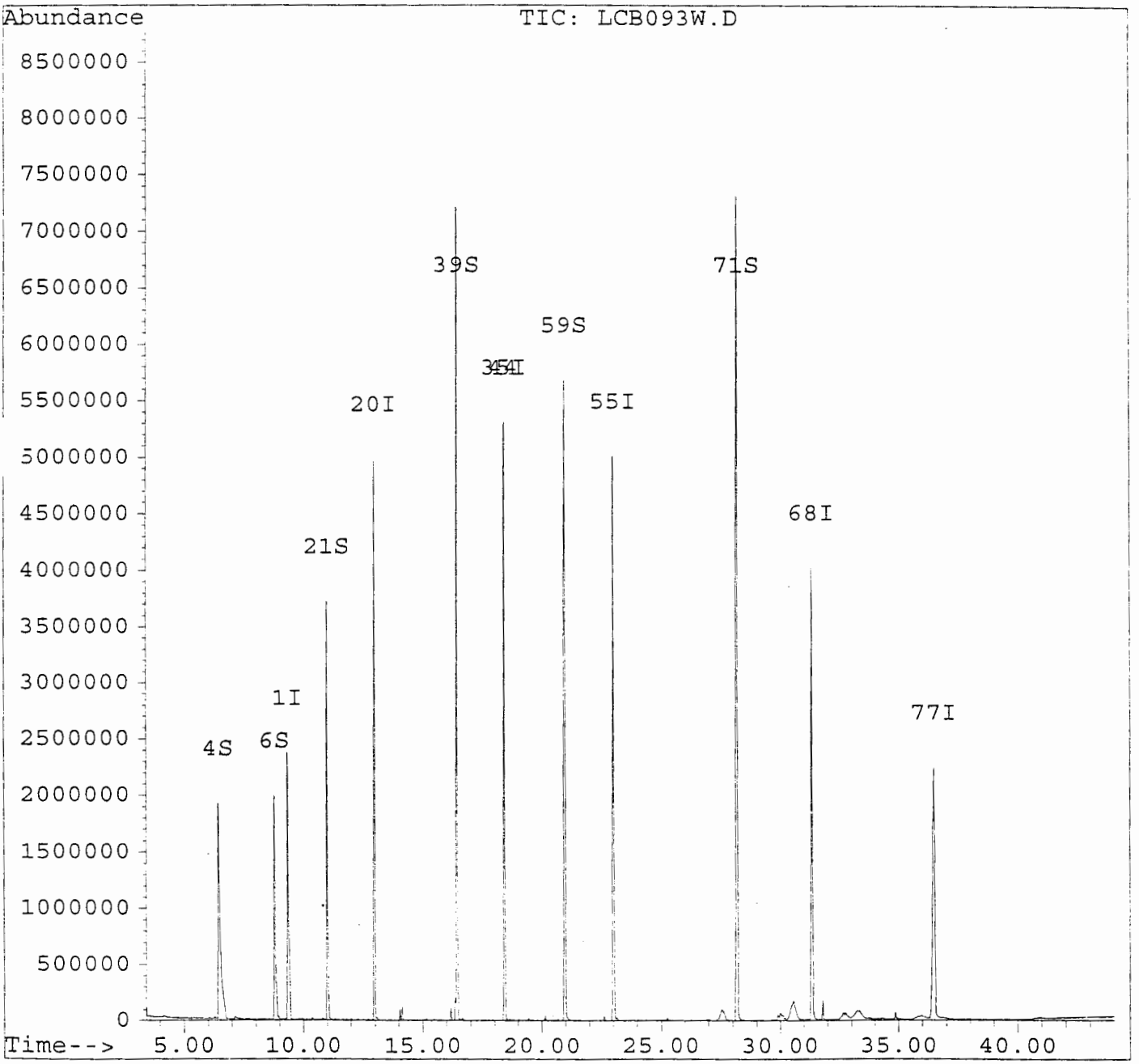
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\E01OCT98\LCB093W.D
Acq On : 1 Oct 98 9:43 am
Sample : Lab Control Blank 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 1 10:28 1998

Vial: 4
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 15:32:54 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\LCS092W.D Vial: 5
Acq On : 1 Oct 98 10:36 am Operator: TMJ
Sample : Lab Control Spike 8270#092W Inst : HP 5971 -
Misc : 9/28/98 1000/1 IS:S2,13,3 Multiplr: 1.00
Quant Time: Oct 2 11:03 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.25	152	1041185	40.00	ppb	-0.04
20) Naphthalene-d8	11.68	136	3836895	40.00	ppb	-0.03
35) Acenaphthene-d10	16.80	164	2417474	40.00	ppb	-0.03
55) Phenanthrene-d10	21.13	188	3381002	40.00	ppb	-0.01
68) Chyrsene-d12	29.01	240	2096272	40.00	ppb	-0.02
77) Perylene-d12	32.70	264	1457492	40.00	ppb	-0.01

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol (s.s.)	5.63	112	3001641	71.74	ppb	35.87%
6) Phenol-d5 (s.s)	7.77	99	3084533	67.60	ppb	33.80%
21) Nitrobenzene-d5 (s.s)	9.82	82	3062981	67.45	ppb	67.45%
39) 2-Fluorobiphenyl (s.s)	14.92	172	5218519	75.45	ppb	75.45%
59) 2,4,6-Tribromophenol (s.s)	19.24	330	1227005	200.81	ppb	100.40%
71) Terphenyl-d14 (s.s)	26.01	244	4334406	93.78	ppb	93.78%

M 10-2-98

·get Compounds							Qvalue
.) Pyridine	3.39	79	1053098	33.45	ppb	m	0
3) N-Nitrosodimethylamine	3.40	74	893585	36.90	ppb	m	0
5) Aniline	7.62	93	3860078	83.70	ppb		97
7) Phenol	7.80	94	3147021	60.82	ppb	#	67
8) bis(2-Chloroethyl)ether	7.77	63	1748130	58.20	ppb	#	71
9) 2-Chlorophenol	7.91	128	4575886	124.43	ppb		92
10) 1,3-Dichlorobenzene	8.15	146	1918997	54.84	ppb		99
11) 1,4-Dichlorobenzene	8.29	146	2306435	59.09	ppb		99
12) 1,2-Dichlorobenzene	8.75	146	2008332	58.32	ppb		99
13) Benzyl alcohol	8.81	108	1752200	63.99	ppb		89
14) 2-Methylphenol	9.23	108	5092381	136.00	ppb		96
15) bis(2-Chloroisopropyl) eth	9.13	45	3502711	64.82	ppb	#	74
16) n-Nitroso-di-n-propylamine	9.57	70	2401053	78.32	ppb	#	88
17) Hexachloroethane	9.51	117	959756	56.37	ppb		92
18) 3&4-Methylphenol	9.69	108	7046819	193.06	ppb		98
19) Benzoic acid	11.61	122	70631	3.04	ppb	#	1
22) Nitrobenzene	9.88	77	2687813	59.98	ppb	#	88
23) Isophorone	10.55	82	6604786	73.32	ppb		94
24) 2-Nitrophenol	10.76	139	3509687	149.88	ppb	#	84
25) 2,4-Dimethylphenol	11.07	107	5557543	126.81	ppb	#	87
26) bis(2-Chloroethoxy)methane	11.22	93	3255454	65.45	ppb		98
27) 2,4-Dichlorophenol	11.49	162	4195582	141.77	ppb		94
28) 1,2,4-Trichlorobenzene	11.58	180	1859425	64.82	ppb		96
29) Naphthalene	11.74	128	6435384	67.55	ppb		99
?0) 4-Chloroaniline	12.07	127	2921547	83.93	ppb		99
) Hexachlorobutadiene	12.27	225	1135948	75.23	ppb		99
2) 4-Chloro-3-methylphenol	13.69	107	5254669	139.27	ppb	#	52

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\LCS092W.D
Acq On : 1 Oct 98 10:36 am
Sample : Lab Control Spike 8270#092W
Misc : 9/28/98 1000/1 IS:S2,13,3
Quant Time: Oct 2 11:03 1998

Vial: 5
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration

TM 10-2-98

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
33)	2-Methylnaphthalene	13.69	142	4982569	78.18	ppb	m	68
34)	1-Methylnaphthalene	14.02	142	4278128	70.84	ppb		96
36)	Hexachlorocyclopentadiene	14.38	237	375454	32.42	ppb		99
37)	2,4,6-Trichlorophenol	14.77	196	2465003	155.84	ppb		96
38)	2,4,5-Trichlorophenol	14.92	196	2661420	160.92	ppb		96
40)	2-Chloronaphthalene	15.14	162	4301307	69.63	ppb		96
41)	2-Nitroaniline	15.69	65	1983427	75.05	ppb	#	80
42)	Dimethylphthalate	16.35	163	6438911	83.14	ppb	#	98
43)	Acenaphthylene	16.35	152	6312254	68.96	ppb		98
44)	2,6-Dinitrotoluene	16.55	165	1660901	85.38	ppb	#	79
45)	3-Nitroaniline	16.97	138	1538926	128.98	ppb		86
46)	Acenaphthene	16.91	153	4050867	69.85	ppb		94
47)	2,4-Dinitrophenol	17.27	184	835062	86.43	ppb	#	33
48)	4-Nitrophenol	17.90	109	635222	52.62	ppb	m	85
49)	Dibenzofuran	17.38	168	6813461	75.66	ppb		90
50)	2,4-Dinitrotoluene	17.69	165	2298593	86.80	ppb	#	76
51)	Diethylphthalate	18.46	149	6331061	84.13	ppb	#	93
52)	Fluorene	18.40	166	5972956	80.78	ppb		95
53)	4-Chlorophenyl-phenylether	18.48	204	2248138	88.35	ppb	#	81
54)	4-Nitroaniline	18.89	138	1429091	111.21	ppb	#	77
56)	4,6-Dinitro-2-methylphenol	18.94	198	2012296	195.81	ppb	#	1
57)	n-Nitrosodiphenylamine	18.95	169	4068956	95.16	ppb		95
58)	1,2-Diphenylhydrazine	18.98	77	11789146	73.85	ppb		95
60)	4-Bromophenyl-phenylether	19.90	248	1249266	90.39	ppb	#	76
61)	Hexachlorobenzene	20.27	284	1247563	94.62	ppb	#	77
62)	Pentachlorophenol	20.93	266	1583814	188.72	ppb		98
63)	Phenanthrene	21.21	178	7187696	80.96	ppb		98
64)	Anthracene	21.35	178	6461778	74.91	ppb		98
65)	Carbazole	21.96	167	6374059	135.04	ppb		97
66)	Di-n-butylphthalate	23.27	149	10179670	78.50	ppb		98
67)	Fluoranthene	24.74	202	6613151	82.00	ppb		100
69)	Benzidine	25.31	184	765144	143.77	ppb		98
70)	Pyrene	25.38	202	6093406	86.14	ppb		98
72)	Butylbenzylphthalate	27.67	149	4974792	95.19	ppb		93
73)	Benzo[a]anthracene	28.97	228	5699919	87.83	ppb		99
74)	3,3'-Dichlorobenzidine	29.08	252	1492110	104.81	ppb		96
75)	Chrysene	29.11	228	5091618	89.22	ppb		98
76)	bis(2-Ethylhexyl)phthalate	29.49	149	6163737	92.46	ppb	#	91
78)	Di-n-octylphthalate	31.21	149	10689189	93.53	ppb		98
79)	Benzo[b]fluoranthene	31.93	252	5356110	93.60	ppb		98
80)	Benzo[k]fluoranthene	31.99	252	2986349	68.38	ppb		96
81)	Benzo[a]pyrene	32.60	252	4108828	89.14	ppb		98
82)	Indeno[1,2,3-cd]pyrene	35.00	276	3796025	90.17	ppb	#	45

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\LCS092W.D
Acq On : 1 Oct 98 10:36 am
Sample : Lab Control Spike 8270#092W
Misc : 9/28/98 1000/1 IS:S2,13,3
Quant Time: Oct 2 11:03 1998

Vial: 5
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration

M 10-2-98

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
83) Dibenz[a,h]anthracene	35.06	278	3242998	99.16 ppb	#	95
84) Benzo[g,h,i]perylene	35.64	276	3206443	91.24 ppb		98

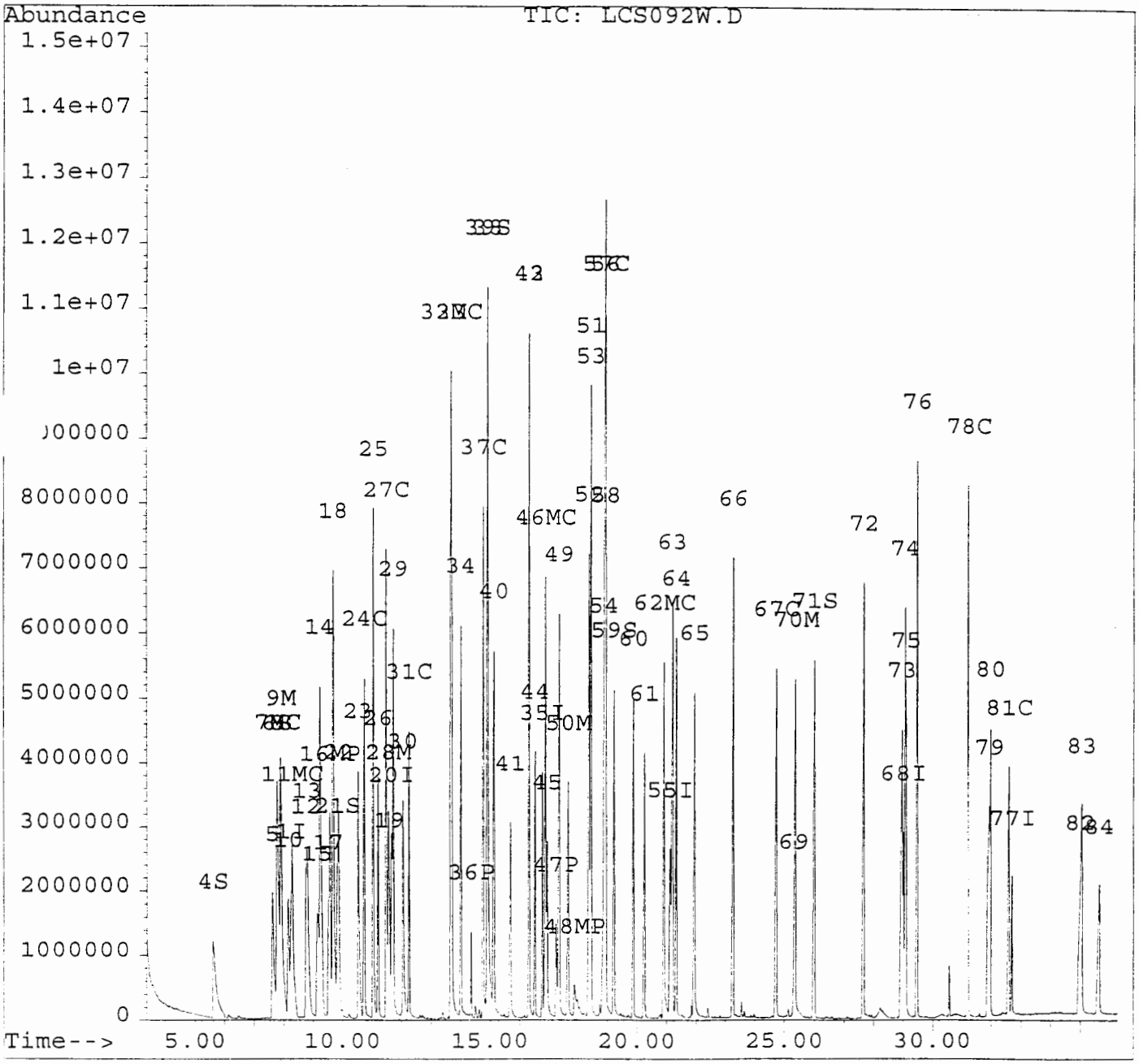
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\LCS092W.D
Acq On : 1 Oct 98 10:36 am
Sample : Lab Control Spike 8270#092W
Misc : 9/28/98 1000/1 IS:S2,13,3
Quant Time: Oct 2 11:03 1998

Vial: 5
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\LCSD092W.D Vial: 6
Acq On : 1 Oct 98 11:20 am Operator: TMJ
Sample : Lab Control Spike Dup 8270#092W Inst : HP 5971 -
Misc : 9/28/98 1000/1 IS:S2,16,6 Multiplr: 1.00
Quant Time: Oct 2 11:08 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.26	152	1081358	40.00	ppb	-0.03
20) Naphthalene-d8	11.67	136	3825781	40.00	ppb	-0.03
35) Acenaphthene-d10	16.80	164	2417709	40.00	ppb	-0.03
55) Phenanthrene-d10	21.12	188	3436264	40.00	ppb	-0.02
68) Chyrsene-d12	29.01	240	2107685	40.00	ppb	-0.02
77) Perylene-d12	32.70	264	1464888	40.00	ppb	-0.01

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol (s.s.)	5.64	112	2782281	64.03	ppb	32.02%
6) Phenol-d5 (s.s)	7.77	99	2854859	60.24	ppb	30.12%
21) Nitrobenzene-d5 (s.s)	9.82	82	2595226	57.31	ppb	57.31%
39) 2-Fluorobiphenyl (s.s)	14.91	172	4829319	69.81	ppb	69.81%
59) 2,4,6-Tribromophenol (s.s)	19.24	330	1135490	182.84	ppb	91.42%
71) Terphenyl-d14 (s.s)	26.01	244	3975860	85.56	ppb	85.56%

M 10-2-98

rget Compounds							Qvalue
2) Pyridine	3.39	79	793326	24.26	ppb	m	0
3) N-Nitrosodimethylamine	3.42	74	804842	32.00	ppb	m	0
5) Aniline	7.63	93	3629352	75.78	ppb		98
7) Phenol	7.81	94	3119806	58.06	ppb		92
8) bis(2-Chloroethyl)ether	7.77	63	1623354	52.04	ppb	#	69
9) 2-Chlorophenol	7.91	128	4215493	110.37	ppb		91
10) 1,3-Dichlorobenzene	8.15	146	1514787	41.68	ppb		99
11) 1,4-Dichlorobenzene	8.29	146	1811826	44.69	ppb		99
12) 1,2-Dichlorobenzene	8.75	146	1599159	44.71	ppb		99
13) Benzyl alcohol	8.80	108	1754581	61.70	ppb		89
14) 2-Methylphenol	9.24	108	4903859	126.10	ppb		95
15) bis(2-Chloroisopropyl) eth	9.13	45	3116198	55.52	ppb	#	74
16) n-Nitroso-di-n-propylamine	9.57	70	2394734	75.21	ppb	#	88
17) Hexachloroethane	9.52	117	736944	41.67	ppb		92
18) 3&4-Methylphenol	9.69	108	6893004	181.83	ppb		98
19) Benzoic acid	11.70	122	249347	10.35	ppb	#	31
22) Nitrobenzene	9.87	77	2668631	59.73	ppb		91
23) Isophorone	10.54	82	6616742	73.66	ppb		94
24) 2-Nitrophenol	10.75	139	3284809	140.68	ppb	#	84
25) 2,4-Dimethylphenol	11.06	107	5467488	125.12	ppb	#	86
26) bis(2-Chloroethoxy)methane	11.22	93	3195603	64.44	ppb		98
27) 2,4-Dichlorophenol	11.49	162	4064250	137.73	ppb		93
28) 1,2,4-Trichlorobenzene	11.58	180	1639584	57.32	ppb		96
29) Naphthalene	11.74	128	5969054	62.84	ppb		99
30) 4-Chloroaniline	12.07	127	2949956	85.00	ppb		100
) Hexachlorobutadiene	12.27	225	997094	66.23	ppb		99
2) 4-Chloro-3-methylphenol	13.69	107	5267515	140.01	ppb	#	55

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\LCSD092W.D
Acq On : 1 Oct 98 11:20 am
Sample : Lab Control Spike Dup 8270#092W
Misc : 9/28/98 1000/1 IS:S2,16,6
Quant Time: Oct 2 11:08 1998

Vial: 6
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration

M 10-2-98

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
33)	2-Methylnaphthalene	13.69	142	4010112	63.11	ppb	m	67
34)	1-Methylnaphthalene	14.02	142	4215362	70.01	ppb		95
36)	Hexachlorocyclopentadiene	14.37	237	343509	29.66	ppb		98
37)	2,4,6-Trichlorophenol	14.78	196	2515246	159.00	ppb		96
38)	2,4,5-Trichlorophenol	14.92	196	2743439	165.86	ppb		97
40)	2-Chloronaphthalene	15.14	162	4268877	69.10	ppb		96
41)	2-Nitroaniline	15.70	65	1990874	75.33	ppb	#	80
42)	Dimethylphthalate	16.35	163	6532864	84.35	ppb	#	98
43)	Acenaphthylene	16.35	152	6364531	69.53	ppb		98
44)	2,6-Dinitrotoluene	16.55	165	1689415	86.83	ppb	#	81
45)	3-Nitroaniline	16.97	138	1583929	132.74	ppb		87
46)	Acenaphthene	16.90	153	4087937	70.48	ppb		95
47)	2,4-Dinitrophenol	17.28	184	1561870	161.64	ppb	#	67
48)	4-Nitrophenol	17.90	109	612581	50.74	ppb	#	84
49)	Dibenzofuran	17.39	168	6910598	76.73	ppb		90
[illegible])	2,4-Dinitrotoluene	17.70	165	2352905	88.84	ppb	#	75
[illegible])	Diethylphthalate	18.46	149	6395827	84.98	ppb	#	93
52)	Fluorene	18.40	166	5865588	79.32	ppb		96
53)	4-Chlorophenyl-phenylether	18.48	204	2257105	88.69	ppb	#	81
54)	4-Nitroaniline	18.90	138	1492964	116.17	ppb	#	80
56)	4,6-Dinitro-2-methylphenol	18.95	198	2353262	225.30	ppb	#	1
57)	n-Nitrosodiphenylamine	18.96	169	4147801	95.44	ppb		94
58)	1,2-Diphenylhydrazine	18.98	77	11924033	73.49	ppb		93
60)	4-Bromophenyl-phenylether	19.90	248	1257367	89.52	ppb	#	76
61)	Hexachlorobenzene	20.27	284	1254751	93.64	ppb	#	78
62)	Pentachlorophenol	20.93	266	1588873	186.27	ppb		97
63)	Phenanthrene	21.22	178	7268809	80.56	ppb		98
64)	Anthracene	21.35	178	6686550	76.26	ppb	m	98
65)	Carbazole	21.96	167	6421157	133.85	ppb		98
66)	Di-n-butylphthalate	23.27	149	10259908	77.84	ppb		98
67)	Fluoranthene	24.74	202	6592055	80.43	ppb		100
69)	Benzidine	25.31	184	729785	136.38	ppb	#	97
70)	Pyrene	25.37	202	6150859	86.48	ppb		98
72)	Butylbenzylphthalate	27.67	149	5082789	96.73	ppb		93
73)	Benzo[a]anthracene	28.96	228	5731425	87.84	ppb		99
74)	3,3'-Dichlorobenzidine	29.08	252	1517425	106.01	ppb		96
75)	Chrysene	29.11	228	5221551	91.00	ppb		98
76)	bis(2-Ethylhexyl)phthalate	29.48	149	6303971	94.05	ppb	#	92
78)	Di-n-octylphthalate	31.20	149	11003822	95.80	ppb		98
79)	Benzo[b]fluoranthene	31.93	252	5578202	96.99	ppb		98
[illegible]0)	Benzo[k]fluoranthene	31.99	252	3550736	80.89	ppb	m	98
[illegible])	Benzo[a]pyrene	32.60	252	4194505	90.54	ppb		97
[illegible]2)	Indeno[1,2,3-cd]pyrene	35.00	276	3899586	92.16	ppb	#	45

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\LCSD092W.D Vial: 6
Acq On : 1 Oct 98 11:20 am Operator: TMJ
Sample : Lab Control Spike Dup 8270#092W Inst : HP 5971 -
Misc : 9/28/98 1000/1 IS:S2,16,6 Multiplr: 1.00
Quant Time: Oct 2 11:08 1998

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration

JT 10-2-98

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
83) Dibenz[a,h]anthracene	35.06	278	3314701	100.84 ppb	95
84) Benzo[g,h,i]perylene	35.64	276	3293263	93.24 ppb	98

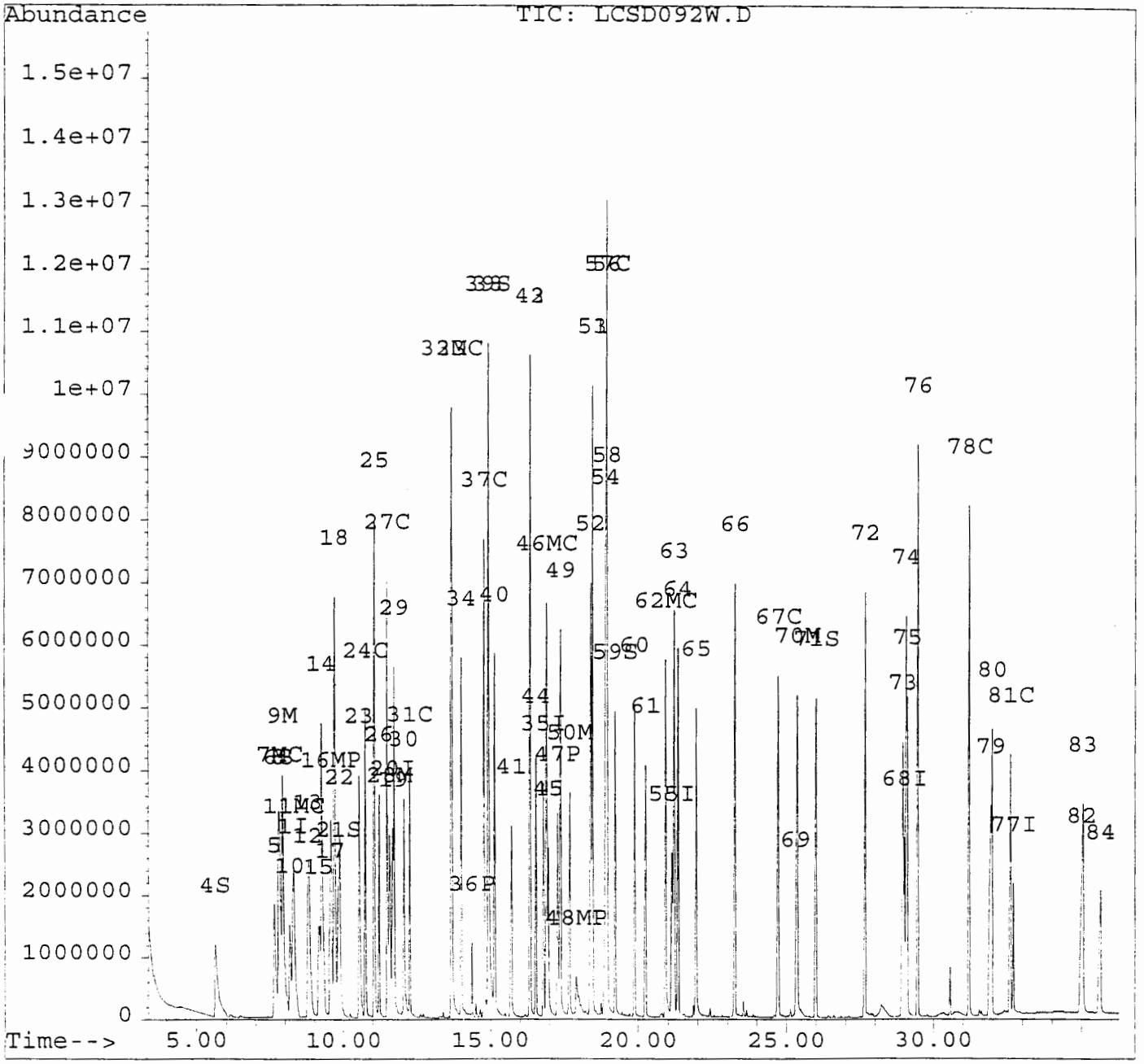
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : C:\HPCHEM\1\DATA\F01OCT98\LCSD092W.D
Acq On : 1 Oct 98 11:20 am
Sample : Lab Control Spike Dup 8270#092W
Misc : 9/28/98 1000/1 IS:S2,16,6
Quant Time: Oct 2 11:08 1998

Vial: 6
Operator: TMJ
Inst : HP 5971 -
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\8270-39F.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Wed Sep 30 09:42:16 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : E:\HPCHEM\1\DATA\E01OCT98\LCS093W.D Vial: 5
Acq On : 1 Oct 98 10:36 am Operator: TMJ
Sample : Lab Control Spike 8270#093W Inst : INST-E
Misc : 9/29/98 1000/1 IS S2,16,6 Multiplr: 1.00
Quant Time: Oct 2 12:54 1998

Method : E:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Oct 02 09:43:41 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.35	152	1605769	40.00	ppb		-0.02
20) Naphthalene-d8	13.02	136	6592123	40.00	ppb		0.00
35) Acenaphthene-d10	18.47	164	3691255	40.00	ppb		-0.01
55) Phenanthrene-d10	23.07	188	6729659	40.00	ppb		0.00
68) Chyrsene-d12	31.42	240	5169925	40.00	ppb		0.02
77) Perylene-d12	36.58	264	5450647	40.00	ppb		0.00
System Monitoring Compounds							**%Recovery**
4) 2-Fluorophenol (s.s)	6.45	112	3549685	65.97	ppb		32.99%
6) Phenol-d5 (s.s)	8.81	99	3854458	60.11	ppb		30.06%
21) Nitrobenzene-d5 (s.s)	11.04	82	4845249	77.97	ppb		77.97%
39) 2-Fluorobiphenyl (s.s)	16.49	172	7881046	74.14	ppb		74.14%
59) 2,4,6-Tribromophenol (s.s)	21.06	330	2779944	185.06	ppb		92.53%
71) Terphenyl-d14 (s.s)	28.22	244	10402576	90.35	ppb		90.35%
Target Compounds							**Qvalue**
2) Pyridine	3.90	79	1781945	42.25	ppb		93
3) N-Nitrosodimethylamine	3.91	74	1317847	40.69	ppb	#	100
5) Aniline	8.70	93	6225893	78.88	ppb		98
7) Phenol	8.85	94	3906971	55.01	ppb	#	28
8) bis(2-Chloroethyl)ether	8.88	63	5418935	101.82	ppb	#	4
9) 2-Chlorophenol	8.94	128	7424266	126.74	ppb		96
10) 1,3-Dichlorobenzene	9.24	146	3436458	60.52	ppb		98
11) 1,4-Dichlorobenzene	9.39	146	3740213	61.86	ppb		94
12) 1,2-Dichlorobenzene	9.88	146	3394665	61.49	ppb		100
13) Benzyl Alcohol	9.99	108	2582347	67.17	ppb		97
14) 2-Methylphenol	10.41	108	6618764	131.21	ppb		100
15) Bis(2-chloroisopropyl) eth	10.33	45	4871747	84.17	ppb	#	52
16) n-Nitroso-di-n-propylamine	10.85	70	2306151	61.68	ppb	#	96
17) Hexachloroethane	10.71	117	1479279	61.35	ppb		92
18) 3&4-Methylphenol	10.90	108	9460747	188.41	ppb		90
19) Benzoic Acid	12.91	122	76718	2.21	ppb	#	1
22) Nitrobenzene	11.10	77	4549590	73.01	ppb		96
23) Isophorone	11.94	82	11287889	87.08	ppb	#	88
24) 2-Nitrophenol	12.04	139	6393698	164.53	ppb	m	0
25) 2,4-Dimethylphenol	12.38	107	9040219	138.95	ppb		97
26) bis(2-Chloroethoxy)methane	12.58	93	5720844	74.35	ppb		98
27) 2,4-Dichlorophenol	12.80	162	7006419	143.78	ppb		98
28) 1,2,4-Trichlorobenzene	12.91	180	3204681	68.03	ppb		98
29) Naphthalene	13.08	128	11521293	71.81	ppb		100
30) 4-Chloroaniline	13.45	127	5835694	79.22	ppb		97
31) Hexachlorobutadiene	13.66	225	1689271	71.74	ppb		98
32) 4-Chloro-3-methylphenol	15.11	107	8674828	153.26	ppb		88

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : E:\HPCHEM\1\DATA\E01OCT98\LCS093W.D
Acq On : 1 Oct 98 10:36 am
Sample : Lab Control Spike 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 2 12:54 1998

Vial: 5
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : E:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Oct 02 09:43:41 1998
Response via : Multiple Level Calibration

M 10.2.98

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
33)	2-Methylnaphthalene	15.19	142	7322995	70.64	ppb	m	5
34)	1-Methylnaphthalene	15.52	142	7384428	74.48	ppb		90
36)	Hexachlorocyclopentadiene	15.90	237	1518688	56.63	ppb		99
37)	2,4,6-Trichlorophenol	16.28	196	4978214	143.13	ppb		97
38)	2,4,5-Trichlorophenol	16.40	196	5239318	143.29	ppb		93
40)	2-Chloronaphthalene	16.69	162	7242583	72.19	ppb		97
41)	2-Nitroaniline	17.28	65	3456429	93.36	ppb		98
42)	Dimethylphthalate	18.01	163	11035729	88.53	ppb		98
43)	Acenaphthylene	17.98	152	11405612	70.55	ppb		98
44)	2,6-Dinitrotoluene	18.19	165	2946475	94.16	ppb		95
45)	3-Nitroaniline	18.62	138	3113940	95.45	ppb		98
46)	Acenaphthene	18.58	153	7900121	77.66	ppb		94
47)	2,4-Dinitrophenol	18.89	184	1007070	49.31	ppb	#	28
48)	4-Nitrophenol	19.38	109	986001	51.84	ppb	m	26
49)	Dibenzofuran	19.10	168	11448277	81.12	ppb		99
50)	2,4-Dinitrotoluene	19.38	165	4117221	91.35	ppb		89
51)	Diethylphthalate	20.27	149	11525475	85.67	ppb		100
52)	Fluorene	20.16	166	9622479	83.11	ppb		96
53)	4-Chlorophenyl-phenylether	20.25	204	4053205	78.82	ppb		98
54)	4-Nitroaniline	20.72	138	3189790	97.57	ppb	#	75
56)	4,6-Dinitro-2-methylphenol	20.75	198	2845396	115.24	ppb	#	1
57)	n-Nitrosodiphenylamine	20.77	169	5803075	77.56	ppb		92
58)	1,2-Diphenylhydrazine	20.79	77	23002612	84.04	ppb	#	78
60)	4-Bromophenyl-phenylether	21.75	248	2706694	87.95	ppb		95
61)	Hexachlorobenzene	22.13	284	2775281	86.48	ppb	#	86
62)	Pentachlorophenol	22.81	266	3341913	131.38	ppb		97
63)	Phenanthrene	23.17	178	14643350	85.87	ppb		99
64)	Anthracene	23.31	178	14233652	85.82	ppb		99
65)	Carbazole	23.92	167	13674135	90.74	ppb		97
66)	Di-n-butylphthalate	25.31	149	22196808	89.55	ppb		98
67)	Fluoranthene	26.90	202	15525725	88.49	ppb	#	93
69)	Benzidine	27.46	184	6159763	98.13	ppb	#	98
70)	Pyrene	27.57	202	16019377	87.77	ppb	#	89
72)	Butylbenzylphthalate	29.96	149	12160842	96.49	ppb		93
73)	Benzo[a]anthracene	31.38	228	15828141	95.10	ppb		99
74)	3,3'-Dichlorobenzidine	31.48	252	4755624	99.36	ppb		100
75)	Chrysene	31.54	228	13666371	97.22	ppb		95
76)	bis(2-Ethylhexyl)phthalate	31.86	149	16078560	93.10	ppb	#	94
78)	Di-n-octylphthalate	33.89	149	28054040	92.80	ppb		98
79)	Benzo[b]fluoranthene	35.08	252	16692601	87.24	ppb	m	0
80)	Benzo[k]fluoranthene	35.16	252	14364005	96.15	ppb	m	61
81)	Benzo[a]pyrene	36.36	252	15387227	96.07	ppb	#	96
82)	Indeno[1,2,3-cd]pyrene	42.01	276	15689394	94.50	ppb	m	56

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : E:\HPCHEM\1\DATA\E01OCT98\LCS093W.D
Acq On : 1 Oct 98 10:36 am
Sample : Lab Control Spike 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 2 12:54 1998

Vial: 5
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : E:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Oct 02 09:43:41 1998
Response via : Multiple Level Calibration

M 10-7-98

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
83) Dibenz[a,h]anthracene	42.09	278	13450439	97.30	ppb	#	57
84) Benzo[g,h,i]perylene	43.13	276	14037867	92.12	ppb	#	89

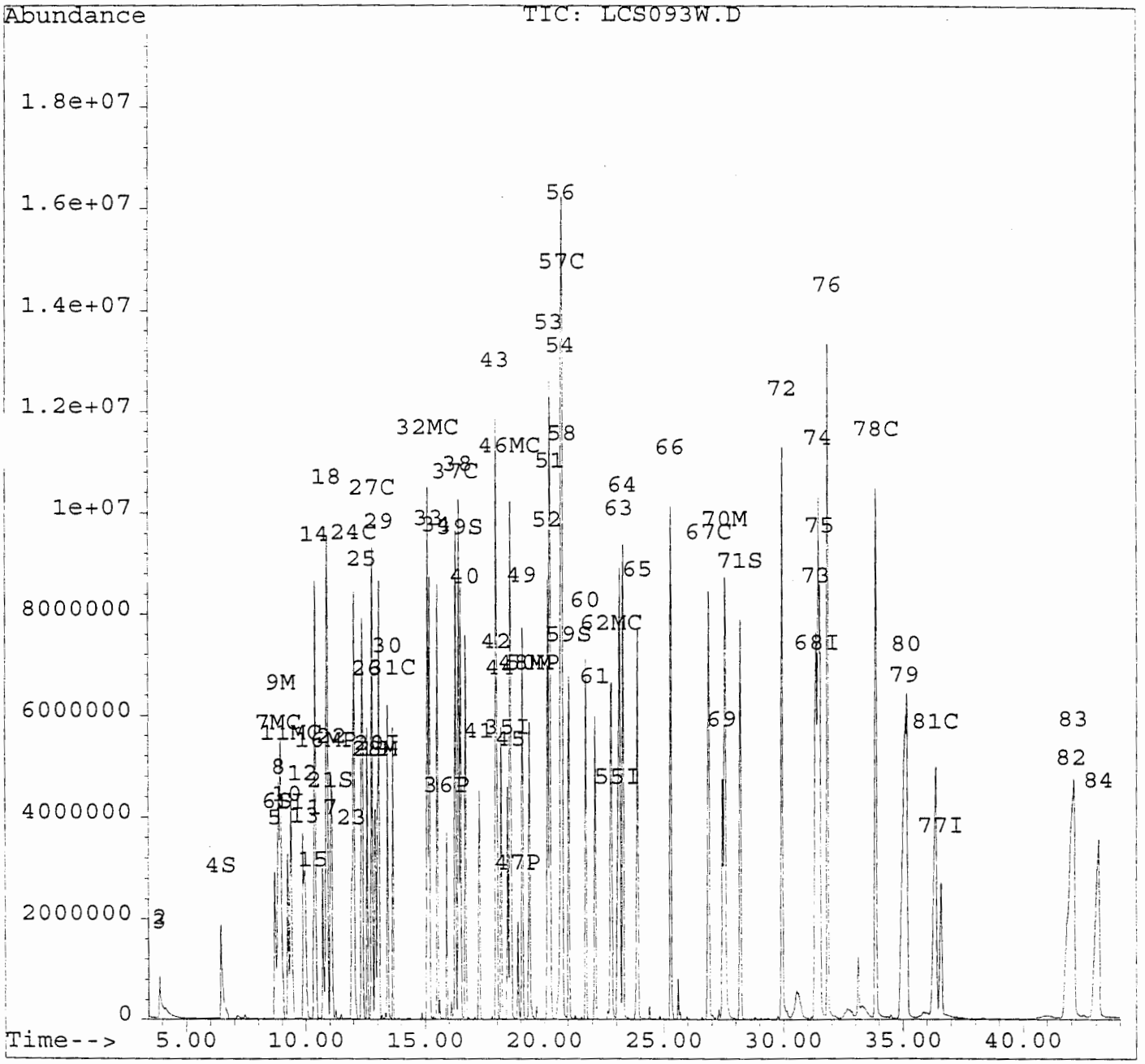
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : E:\HPCHEM\1\DATA\E01OCT98\LCS093W.D
Acq On : 1 Oct 98 10:36 am
Sample : Lab Control Spike 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 2 12:54 1998

Vial: 5
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : E:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Oct 02 09:43:41 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : E:\HPCHEM\1\DATA\E01OCT98\LCSD093W.D Vial: 6
Acq On : 1 Oct 98 11:30 am Operator: TMJ
Sample : Lab Control Spike Dup 8270#093W Inst : INST-E
Misc : 9/29/98 1000/1 IS S2,16,6 Multiplr: 1.00
Quant Time: Oct 2 12:57 1998

Method : E:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Oct 02 09:43:41 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.35	152	1622030	40.00	ppb	-0.02
20) Naphthalene-d8	13.02	136	6796298	40.00	ppb	0.00
35) Acenaphthene-d10	18.46	164	3751961	40.00	ppb	-0.02
55) Phenanthrene-d10	23.09	188	6805413	40.00	ppb	0.02
68) Chyrsene-d12	31.43	240	5303461	40.00	ppb	0.02
77) Perylene-d12	36.60	264	5538146	40.00	ppb	0.02

System Monitoring Compounds						%Recovery
4) 2-Fluorophenol (s.s)	6.45	112	5076296	93.40	ppb	46.70%
6) Phenol-d5 (s.s)	8.83	99	4444579	68.62	ppb	34.31%
21) Nitrobenzene-d5 (s.s)	11.04	82	5470788	85.39	ppb	85.39%
39) 2-Fluorobiphenyl (s.s)	16.49	172	8498572	78.66	ppb	78.66%
59) 2,4,6-Tribromophenol (s.s)	21.06	330	2635732	173.51	ppb	86.75%
71) Terphenyl-d14 (s.s)	28.22	244	10663585	90.28	ppb	90.28%

M 10-2-98

Target Compounds							Qvalue
2) Pyridine	3.90	79	1700194	39.90	ppb		91
3) N-Nitrosodimethylamine	3.92	74	1541809	47.13	ppb	#	100
5) Aniline	8.69	93	6983159	87.58	ppb		99
7) Phenol	8.86	94	5215311	72.70	ppb	#	28
8) bis(2-Chloroethyl)ether	8.89	63	6266206	116.56	ppb	#	4
9) 2-Chlorophenol	8.94	128	9278768	156.81	ppb		98
10) 1,3-Dichlorobenzene	9.24	146	4009909	69.91	ppb		99
11) 1,4-Dichlorobenzene	9.39	146	4447710	72.83	ppb		96
12) 1,2-Dichlorobenzene	9.89	146	3964985	71.10	ppb		99
13) Benzyl Alcohol	9.98	108	2859488	73.63	ppb		97
14) 2-Methylphenol	10.41	108	7486476	146.92	ppb		100
15) Bis(2-chloroisopropyl) eth	10.33	45	5311752	90.85	ppb	#	52
16) n-Nitroso-di-n-propylamine	10.86	70	2369525	62.74	ppb	#	93
17) Hexachloroethane	10.71	117	1715190	70.42	ppb		93
18) 3&4-Methylphenol	10.91	108	11054462	217.94	ppb		92
19) Benzoic Acid	12.92	122	85929	2.45	ppb	#	1
22) Nitrobenzene	11.10	77	5078979	79.05	ppb		96
23) Isophorone	11.96	82	12117708	90.68	ppb	#	86
24) 2-Nitrophenol	12.04	139	7127071	177.89	ppb	m	0
25) 2,4-Dimethylphenol	12.39	107	9644233	143.78	ppb		98
26) bis(2-Chloroethoxy)methane	12.58	93	6325611	79.74	ppb		98
27) 2,4-Dichlorophenol	12.80	162	7857884	156.41	ppb		97
28) 1,2,4-Trichlorobenzene	12.92	180	3544233	72.98	ppb		98
29) Naphthalene	13.09	128	12526337	75.73	ppb		99
30) 4-Chloroaniline	13.45	127	6169541	81.24	ppb		98
31) Hexachlorobutadiene	13.67	225	1874052	77.20	ppb		99
32) 4-Chloro-3-methylphenol	15.12	107	9546050	163.59	ppb		89

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : E:\HPCHEM\1\DATA\E01OCT98\LCSD093W.D
Acq On : 1 Oct 98 11:30 am
Sample : Lab Control Spike Dup 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 2 12:57 1998

Vial: 6
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : E:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Oct 02 09:43:41 1998
Response via : Multiple Level Calibration

JM 10-2-98

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
33)	2-Methylnaphthalene	15.19	142	7476545	69.96	ppb	m	5
34)	1-Methylnaphthalene	15.52	142	8068507	78.94	ppb		90
36)	Hexachlorocyclopentadiene	15.90	237	1609935	59.07	ppb		99
37)	2,4,6-Trichlorophenol	16.29	196	5466055	154.61	ppb		98
38)	2,4,5-Trichlorophenol	16.42	196	5693392	153.19	ppb		91
40)	2-Chloronaphthalene	16.69	162	7806659	76.56	ppb		98
41)	2-Nitroaniline	17.28	65	3630317	96.47	ppb		98
42)	Dimethylphthalate	18.01	163	11706225	92.39	ppb		98
43)	Acenaphthylene	17.98	152	12043013	73.29	ppb		98
44)	2,6-Dinitrotoluene	18.20	165	3150582	99.05	ppb		99
45)	3-Nitroaniline	18.62	138	3252707	98.09	ppb		97
46)	Acenaphthene	18.58	153	8180734	79.12	ppb		96
47)	2,4-Dinitrophenol	18.94	184	4018559	193.57	ppb	#	60
48)	4-Nitrophenol	19.40	109	1419211	73.41	ppb	#	29
49)	Dibenzofuran	19.11	168	12518609	87.27	ppb		100
50)	2,4-Dinitrotoluene	19.39	165	4406275	96.18	ppb	#	85
51)	Diethylphthalate	20.28	149	12730313	93.10	ppb		100
52)	Fluorene	20.16	166	10162199	86.35	ppb		93
53)	4-Chlorophenyl-phenylether	20.25	204	4512537	86.34	ppb		98
54)	4-Nitroaniline	20.75	138	3009648	90.57	ppb	#	69
56)	4,6-Dinitro-2-methylphenol	20.77	198	4911890	196.72	ppb	#	1
57)	n-Nitrosodiphenylamine	20.78	169	6109202	80.74	ppb	#	88
58)	1,2-Diphenylhydrazine	20.80	77	25019182	90.39	ppb	#	51
60)	4-Bromophenyl-phenylether	21.76	248	2772252	89.08	ppb		96
61)	Hexachlorobenzene	22.15	284	2973202	91.62	ppb	#	88
62)	Pentachlorophenol	22.79	266	4433645	172.36	ppb		98
63)	Phenanthrene	23.18	178	15123940	87.70	ppb		99
64)	Anthracene	23.32	178	15118518	90.14	ppb		98
65)	Carbazole	23.92	167	14593485	95.76	ppb		97
66)	Di-n-butylphthalate	25.32	149	23854346	95.16	ppb		98
67)	Fluoranthene	26.89	202	16773437	94.53	ppb	#	93
69)	Benzidine	27.47	184	6021590	93.51	ppb	#	96
70)	Pyrene	27.58	202	17079727	91.23	ppb	#	89
72)	Butylbenzylphthalate	29.97	149	12852457	99.41	ppb		92
73)	Benzo[a]anthracene	31.37	228	16473365	96.48	ppb		97
74)	3,3'-Dichlorobenzidine	31.48	252	5041152	102.68	ppb		100
75)	Chrysene	31.54	228	13606888	94.36	ppb		94
76)	bis(2-Ethylhexyl)phthalate	31.87	149	16801631	94.84	ppb	#	95
78)	Di-n-octylphthalate	33.89	149	29936703	97.46	ppb		98
79)	Benzo[b]fluoranthene	35.09	252	18814060	96.77	ppb	m	0
80)	Benzo[k]fluoranthene	35.17	252	13565577	89.37	ppb	m	68
81)	Benzo[a]pyrene	36.38	252	15692526	96.43	ppb	#	95
82)	Indeno[1,2,3-cd]pyrene	42.01	276	16339891	96.87	ppb	m	56

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : E:\HPCHEM\1\DATA\E01OCT98\LCSD093W.D
Acq On : 1 Oct 98 11:30 am
Sample : Lab Control Spike Dup 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 2 12:57 1998

Vial: 6
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : E:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Oct 02 09:43:41 1998
Response via : Multiple Level Calibration

10-2-98

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
83) Dibenz[a,h]anthracene	42.13	278	14052988	100.06	ppb	#	90
84) Benzo[g,h,i]perylene	43.13	276	14777876	95.44	ppb	#	89

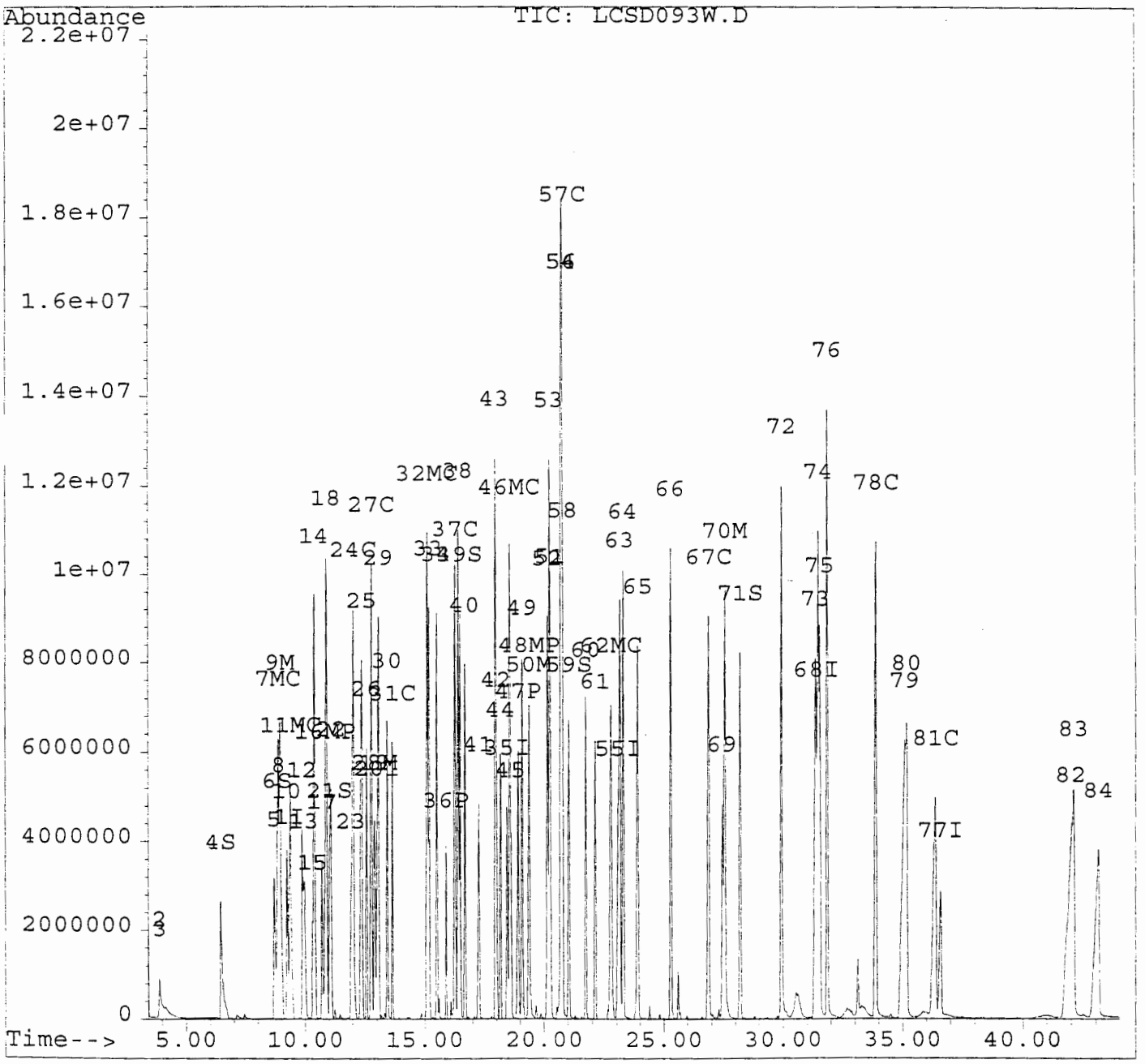
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : E:\HPCHEM\1\DATA\E01OCT98\LCSD093W.D
Acq On : 1 Oct 98 11:30 am
Sample : Lab Control Spike Dup 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 2 12:57 1998

Vial: 6
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : E:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Oct 02 09:43:41 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : E:\HPCHEM\1\DATA\E01OCT98\MS-8744.D
Acq On : 1 Oct 98 5:46 pm
Sample : NMHR 84492-8744 MS 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 2 13:00 1998

Vial: 13
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : E:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Oct 02 09:43:41 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.35	152	1537529	40.00	ppb		-0.02
20) Naphthalene-d8	13.02	136	6087377	40.00	ppb		0.00
35) Acenaphthene-d10	18.47	164	3493975	40.00	ppb		-0.01
55) Phenanthrene-d10	23.08	188	6321870	40.00	ppb		0.00
68) Chyrsene-d12	31.43	240	4913824	40.00	ppb		0.03
77) Perylene-d12	36.61	264	5220709	40.00	ppb		0.03
System Monitoring Compounds							**%Recovery**
4) 2-Fluorophenol (s.s)	6.45	112	3155879	61.25	ppb		30.63%
6) Phenol-d5 (s.s)	8.83	99	2938877	47.87	ppb		23.93%
21) Nitrobenzene-d5 (s.s)	11.04	82	4165965	72.59	ppb		72.59%
39) 2-Fluorobiphenyl (s.s)	16.49	172	6916919	68.75	ppb		68.75%
59) 2,4,6-Tribromophenol (s.s)	21.06	330	2291814	162.41	ppb		81.20%
71) Terphenyl-d14 (s.s)	28.24	244	9044189	82.65	ppb		82.65%
Target Compounds							**Qvalue**
2) Pyridine	3.90	79	971759	24.06	ppb	#	66
3) N-Nitrosodimethylamine	3.92	74	1109687	35.78	ppb	#	100
5) Aniline	8.70	93	5269586	69.72	ppb		97
7) Phenol	8.86	94	3568578	52.48	ppb	#	28
8) bis(2-Chloroethyl)ether	8.88	63	2406952	47.23	ppb	#	7
9) 2-Chlorophenol	8.95	128	6602913	117.72	ppb		95
10) 1,3-Dichlorobenzene	9.24	146	3174990	58.39	ppb		98
11) 1,4-Dichlorobenzene	9.40	146	3482087	60.15	ppb		94
12) 1,2-Dichlorobenzene	9.89	146	3202675	60.58	ppb		99
13) Benzyl Alcohol	9.98	108	2191762	59.54	ppb		99
14) 2-Methylphenol	10.41	108	5667299	117.33	ppb		99
15) Bis(2-chloroisopropyl) eth	10.33	45	4626796	83.49	ppb	#	52
16) n-Nitroso-di-n-propylamine	10.84	70	2421637	67.65	ppb	#	86
17) Hexachloroethane	10.72	117	1442348	62.47	ppb		92
18) 3&4-Methylphenol	10.90	108	8325322	173.16	ppb		96
19) Benzoic Acid	12.92	122	69052	2.08	ppb	#	1
22) Nitrobenzene	11.10	77	4136124	71.88	ppb		94
23) Isophorone	11.93	82	10292973	85.99	ppb	#	86
24) 2-Nitrophenol	12.04	139	5541792	154.43	ppb	m	0
25) 2,4-Dimethylphenol	12.39	107	7741072	128.85	ppb		96
26) bis(2-Chloroethoxy)methane	12.58	93	5097619	71.74	ppb		99
27) 2,4-Dichlorophenol	12.80	162	6266319	139.25	ppb		97
28) 1,2,4-Trichlorobenzene	12.92	180	2928314	67.32	ppb		99
29) Naphthalene	13.08	128	10414466	70.29	ppb		99
30) 4-Chloroaniline	13.45	127	4993368	73.41	ppb		99
31) Hexachlorobutadiene	13.67	225	1638694	75.36	ppb		96
32) 4-Chloro-3-methylphenol	15.13	107	7906718	151.27	ppb	#	34

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : E:\HPCHEM\1\DATA\E01OCT98\MS-8744.D Vial: 13
Acq On : 1 Oct 98 5:46 pm Operator: TMJ
Sample : NMHR 84492-8744 MS 8270#093W Inst : INST-E
Misc : 9/29/98 1000/1 IS S2,16,6 Multiplr: 1.00
Quant Time: Oct 2 13:00 1998

Method : E:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Oct 02 09:43:41 1998
Response via : Multiple Level Calibration

M 10-7-98

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
33)	2-Methylnaphthalene	15.19	142	6423952	67.11	ppb	#	81
34)	1-Methylnaphthalene	15.52	142	6895244	75.31	ppb		91
36)	Hexachlorocyclopentadiene	15.90	237	1287771	50.73	ppb		98
37)	2,4,6-Trichlorophenol	16.27	196	4400905	133.67	ppb		98
38)	2,4,5-Trichlorophenol	16.42	196	4756474	137.43	ppb		93
40)	2-Chloronaphthalene	16.70	162	6464717	68.08	ppb		97
41)	2-Nitroaniline	17.28	65	3185505	90.90	ppb		97
42)	Dimethylphthalate	18.02	163	9889786	83.82	ppb		98
43)	Acenaphthylene	17.98	152	10364931	67.73	ppb		98
44)	2,6-Dinitrotoluene	18.20	165	2665421	89.98	ppb		95
45)	3-Nitroaniline	18.63	138	2738390	88.68	ppb		94
46)	Acenaphthene	18.58	153	7046871	73.18	ppb		94
47)	2,4-Dinitrophenol	18.91	184	2254692	116.63	ppb	#	59
48)	4-Nitrophenol	19.38	109	829328	46.06	ppb	#	26
49)	Dibenzofuran	19.11	168	10301007	77.12	ppb		98
50)	2,4-Dinitrotoluene	19.39	165	3808635	89.27	ppb	#	87
51)	Diethylphthalate	20.28	149	10703994	84.06	ppb		99
52)	Fluorene	20.17	166	8607049	78.53	ppb		93
53)	4-Chlorophenyl-phenylether	20.26	204	3650660	75.00	ppb		96
54)	4-Nitroaniline	20.74	138	2811612	90.86	ppb	#	71
56)	4,6-Dinitro-2-methylphenol	20.76	198	3435036	148.09	ppb	#	1
57)	n-Nitrosodiphenylamine	20.78	169	5276965	75.08	ppb		89
58)	1,2-Diphenylhydrazine	20.80	77	21786600	84.73	ppb	#	77
60)	4-Bromophenyl-phenylether	21.76	248	2424739	83.87	ppb		93
61)	Hexachlorobenzene	22.14	284	2660188	88.24	ppb	#	88
62)	Pentachlorophenol	22.81	266	3651683	152.82	ppb		96
63)	Phenanthrene	23.18	178	12944522	80.80	ppb		99
64)	Anthracene	23.31	178	12926315	82.97	ppb		98
65)	Carbazole	23.92	167	12698197	89.70	ppb		96
66)	Di-n-butylphthalate	25.31	149	21554405	92.57	ppb		99
67)	Fluoranthene	26.90	202	14281247	86.64	ppb	#	91
69)	Benzidine	27.46	184	5313742	89.06	ppb	#	96
70)	Pyrene	27.58	202	15170739	87.45	ppb	#	89
72)	Butylbenzylphthalate	29.97	149	11291126	94.26	ppb		90
73)	Benzo[a]anthracene	31.37	228	15037779	95.06	ppb		98
74)	3,3'-Dichlorobenzidine	31.48	252	4297243	94.46	ppb		95
75)	Chrysene	31.55	228	12748570	95.42	ppb		95
76)	bis(2-Ethylhexyl)phthalate	31.86	149	15234090	92.81	ppb	#	95
78)	Di-n-octylphthalate	33.89	149	27899892	96.35	ppb		98
79)	Benzo[b]fluoranthene	35.07	252	15597738	85.10	ppb	m	0
80)	Benzo[k]fluoranthene	35.18	252	11426648	79.85	ppb	m	0
81)	Benzo[a]pyrene	36.40	252	14367290	93.66	ppb	m	95
82)	Indeno[1,2,3-cd]pyrene	42.02	276	15073618	94.79	ppb	m	56

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : E:\HPCHEM\1\DATA\E01OCT98\MS-8744.D
Acq On : 1 Oct 98 5:46 pm
Sample : NMHR 84492-8744 MS 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 2 13:00 1998

Vial: 13
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : E:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Oct 02 09:43:41 1998
Response via : Multiple Level Calibration

JM 10-7-98

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
83) Dibenz[a,h]anthracene	42.12	278	13010836	98.27 ppb	#	91
84) Benzo[g,h,i]perylene	43.13	276	13709622	93.92 ppb	m	52

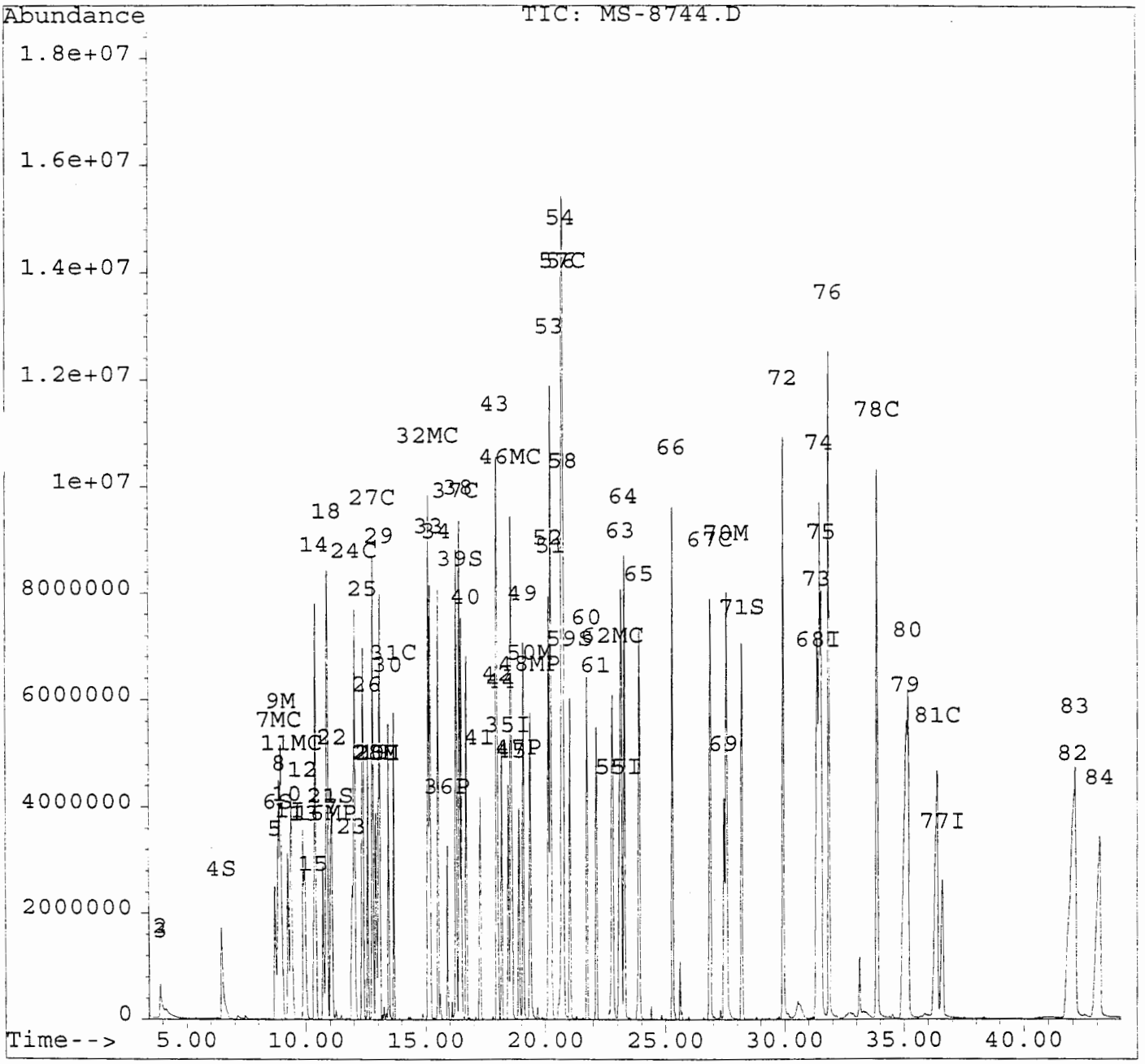
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : E:\HPCHEM\1\DATA\E01OCT98\MS-8744.D
Acq On : 1 Oct 98 5:46 pm
Sample : NMHR 84492-8744 MS 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 2 13:00 1998

Vial: 13
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : E:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Oct 02 09:43:41 1998
Response via : Multiple Level Calibration



Quantitation Report

Data File : E:\HPCHEM\1\DATA\E01OCT98\MSD-8745.D Vial: 14
Acq On : 1 Oct 98 6:39 pm Operator: TMJ
Sample : NMHR 84492-8745 MSD 8270#093W Inst : INST-E
Misc : 9/29/98 1000/1 IS S2,16,6 Multiplr: 1.00
Quant Time: Oct 2 13:02 1998

Method : E:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Oct 02 09:43:41 1998
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.36	152	1793090	40.00 ppb	0.00
20) Naphthalene-d8	13.02	136	7286552	40.00 ppb	0.00
35) Acenaphthene-d10	18.47	164	4104292	40.00 ppb	-0.01
55) Phenanthrene-d10	23.07	188	7355708	40.00 ppb	0.00
68) Chyrsene-d12	31.45	240	5647856	40.00 ppb	0.05
77) Perylene-d12	36.63	264	6239721	40.00 ppb	0.05

System Monitoring Compounds					%Recovery
4) 2-Fluorophenol (s.s)	6.46	112	3693476	61.47 ppb	30.74%
6) Phenol-d5 (s.s)	8.84	99	3595129	50.21 ppb	25.11%
21) Nitrobenzene-d5 (s.s)	11.05	82	4948788	72.04 ppb	72.04%
39) 2-Fluorobiphenyl (s.s)	16.50	172	8054045	68.15 ppb	68.15%
59) 2,4,6-Tribromophenol (s.s)	21.07	330	2889293	175.97 ppb	87.99%
71) Terphenyl-d14 (s.s)	28.24	244	11394959	90.59 ppb	90.59%

10-2-98

Target Compounds						Qvalue
2) Pyridine	3.92	79	956017	20.30 ppb		93
3) N-Nitrosodimethylamine	3.94	74	1288326	35.62 ppb	#	100
5) Aniline	8.70	93	5832419	66.17 ppb		99
7) Phenol	8.86	94	3707858	46.75 ppb	#	28
8) bis(2-Chloroethyl)ether	8.88	63	5253201	88.39 ppb	#	4
9) 2-Chlorophenol	8.95	128	6877396	105.14 ppb		95
10) 1,3-Dichlorobenzene	9.25	146	3568051	56.27 ppb		99
11) 1,4-Dichlorobenzene	9.40	146	3897461	57.73 ppb		95
12) 1,2-Dichlorobenzene	9.89	146	3516137	57.03 ppb		99
13) Benzyl Alcohol	9.99	108	2501574	58.27 ppb		99
14) 2-Methylphenol	10.41	108	6318355	112.17 ppb		99
15) Bis(2-chloroisopropyl) eth	10.34	45	4925783	76.21 ppb	#	52
16) n-Nitroso-di-n-propylamine	10.86	70	2356042	56.43 ppb	#	93
17) Hexachloroethane	10.72	117	1621134	60.21 ppb		92
18) 3&4-Methylphenol	10.91	108	9064624	161.66 ppb		92
19) Benzoic Acid	12.92	122	81332	2.10 ppb	#	1
22) Nitrobenzene	11.10	77	4524729	65.69 ppb		93
23) Isophorone	11.96	82	11418638	79.70 ppb	#	87
24) 2-Nitrophenol	12.04	139	5632891	131.14 ppb	m	0
25) 2,4-Dimethylphenol	12.39	107	8717959	121.23 ppb		97
26) bis(2-Chloroethoxy)methane	12.59	93	5573788	65.53 ppb		99
27) 2,4-Dichlorophenol	12.81	162	6634992	123.18 ppb		97
28) 1,2,4-Trichlorobenzene	12.91	180	3324090	63.84 ppb		99
29) Naphthalene	13.10	128	11564528	65.21 ppb		99
30) 4-Chloroaniline	13.46	127	5626264	69.10 ppb		99
31) Hexachlorobutadiene	13.67	225	1743646	66.99 ppb		99
32) 4-Chloro-3-methylphenol	15.13	107	8907782	142.38 ppb		89

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : E:\HPCHEM\1\DATA\E01OCT98\MSD-8745.D
Acq On : 1 Oct 98 6:39 pm
Sample : NMHR 84492-8745 MSD 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 2 13:02 1998

Vial: 14
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : E:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Oct 02 09:43:41 1998
Response via : Multiple Level Calibration

M 10-2-98

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
33)	2-Methylnaphthalene	15.20	142	7149528	62.40	ppb	m	5
34)	1-Methylnaphthalene	15.52	142	7451696	68.00	ppb		89
36)	Hexachlorocyclopentadiene	15.90	237	1424417	47.77	ppb		98
37)	2,4,6-Trichlorophenol	16.29	196	4432409	114.61	ppb		98
38)	2,4,5-Trichlorophenol	16.43	196	5167062	127.09	ppb		90
40)	2-Chloronaphthalene	16.70	162	7506498	67.29	ppb		97
41)	2-Nitroaniline	17.29	65	3743555	90.94	ppb		95
42)	Dimethylphthalate	18.02	163	11663610	84.15	ppb		98
43)	Acenaphthylene	17.99	152	11541215	64.20	ppb		98
44)	2,6-Dinitrotoluene	18.21	165	3110035	89.38	ppb		96
45)	3-Nitroaniline	18.64	138	3316186	91.42	ppb		96
46)	Acenaphthene	18.59	153	7948979	70.28	ppb		91
47)	2,4-Dinitrophenol	18.91	184	875793	38.56	ppb	#	28
48)	4-Nitrophenol	19.40	109	634818	30.02	ppb	#	20
49)	Dibenzofuran	19.10	168	11835652	75.43	ppb		100
50)	2,4-Dinitrotoluene	19.41	165	4663474	93.06	ppb		93
51)	Diethylphthalate	20.28	149	12306294	82.27	ppb		99
52)	Fluorene	20.17	166	9668488	75.10	ppb		93
53)	4-Chlorophenyl-phenylether	20.25	204	4096987	71.66	ppb		96
54)	4-Nitroaniline	20.74	138	3457767	95.12	ppb	#	77
56)	4,6-Dinitro-2-methylphenol	20.76	198	2072259	76.78	ppb	#	1
57)	n-Nitrosodiphenylamine	20.78	169	6004693	73.42	ppb		91
58)	1,2-Diphenylhydrazine	20.80	77	24307224	81.25	ppb	#	76
60)	4-Bromophenyl-phenylether	21.76	248	2702725	80.35	ppb		95
61)	Hexachlorobenzene	22.16	284	3038321	86.62	ppb	#	88
62)	Pentachlorophenol	22.83	266	3223489	115.94	ppb		96
63)	Phenanthrene	23.18	178	15247672	81.80	ppb		99
64)	Anthracene	23.32	178	15366846	84.77	ppb		99
65)	Carbazole	23.93	167	15316678	92.99	ppb		98
66)	Di-n-butylphthalate	25.33	149	24659776	91.02	ppb		98
67)	Fluoranthene	26.91	202	17428953	90.88	ppb	#	92
69)	Benzidine	27.48	184	6561801	95.69	ppb	#	95
70)	Pyrene	27.61	202	17686980	88.71	ppb	#	89
72)	Butylbenzylphthalate	29.98	149	13406106	97.37	ppb		89
73)	Benzo[a]anthracene	31.38	228	17567163	96.61	ppb		97
74)	3,3'-Dichlorobenzidine	31.50	252	5206744	99.58	ppb		98
75)	Chrysene	31.57	228	14719531	95.85	ppb		95
76)	bis(2-Ethylhexyl)phthalate	31.88	149	18246478	96.72	ppb	#	94
78)	Di-n-octylphthalate	33.91	149	32977386	95.29	ppb		98
79)	Benzo[b]fluoranthene	35.12	252	19524964	89.13	ppb	m	0
80)	Benzo[k]fluoranthene	35.23	252	12853426	75.16	ppb	m	75
81)	Benzo[a]pyrene	36.43	252	17694816	96.51	ppb	#	95
82)	Indeno[1,2,3-cd]pyrene	42.04	276	18574282	97.73	ppb	m	56

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : E:\HPCHEM\1\DATA\E01OCT98\MSD-8745.D
Acq On : 1 Oct 98 6:39 pm
Sample : NMHR 84492-8745 MSD 8270#093W
Misc : 9/29/98 1000/1 IS S2,16,6
Quant Time: Oct 2 13:02 1998

Vial: 14
Operator: TMJ
Inst : INST-E
Multiplr: 1.00

Method : E:\HPCHEM\1\METHODS\8270-72.M
Title : SW-846 Mtd. 8270 and EPA Mtd. 625
Last Update : Fri Oct 02 09:43:41 1998
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
83) Dibenz[a,h]anthracene	42.18	278	15752790	99.55 ppb	#	90
84) Benzo[g,h,i]perylene	43.18	276	16706294	95.76 ppb	#	90

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : E:\HPCHEM\1\DATA\E01OCT98\MSD-8745.D
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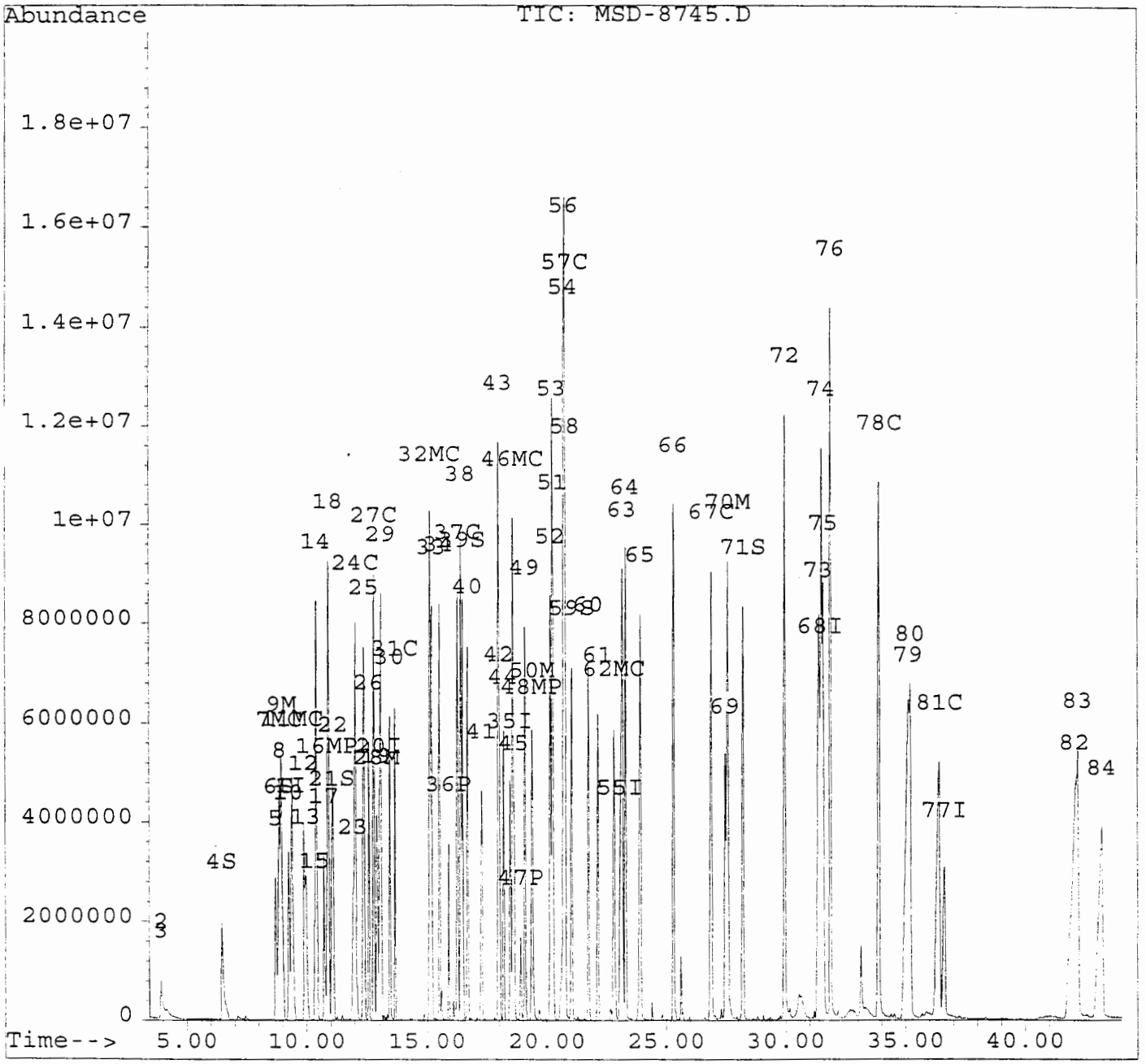

CT&E Environmental Services, Inc. - Anatech Division

RUN LOG
SEMI-VOLATILE GC/MS
HP 5971 Inst: F

Batch: F07AUG98A Date: 8-7-98 Internal Std: S2,10,7 Analyst: [illegible]

Reporte	Client/Project	Sample No.	Ext Batch	Dilution	Initial Vol/Wt	Final Vol	Notes	Inj.
	DFTPP		S2,10,4					1041
	Inst. Blank		8-7-98					
		ICAL5	S2,11,2					
	8270	20						
		50					8270-39F.M	
	Initial	80						
		100						
	Calibration	120						1525

CT&E Environmental Services, Inc. - Anatech Division

RUN LOG
SEMI-VOLATILE GC/MS
HP 5970 Inst: E

Batch: E30SEP98A Date: 9-30-98 Internal Std: S2,16,6 Analyst: YM

Report	Client/Project	Sample No.	Ext Batch	Dilution	Initial Vol/Wt	Final Vol	Notes	Inj.
	DFTPP		S2,16,1					
	Inst. Blank		9-30-98					
		ICAL5	S2,17,3					
	8270	20						
		50					8270-72 M	
	Initial	80						
		100						
	Calibration	120						

CT&E Environmental Services, Inc. - Anatech Division

RUN LOG
SEMI-VOLATILE GC/MS
HP 5971 Inst: F

Batch: F01OCT98A Date: 10-1-98 Internal Std: S2,16,6 Analyst: yy

Reporte	Client/Project	Sample No.	Ext Batch	Dilution	Initial Vol/Wt	Final Vol	Notes	Inj.
	DFTPP		S2,16,2					0848
	CalCk		S2,17,1					
		LCB092W			1000	1		
		LCS092W			↓	↓		
		LCSD092W						
	N/MHR	84464-8677	092W					
		8678	↓					
		8680						
		8681						
		8682	↓		↓	↓		
	BLBO MS	84461-8665	056Sa	.5x	30g	1		
	BLBO	84473-8700	093W		1000	1		
		8701	056Sa	.5x	30g	1		
	SAGR	84467-8687	092W	10x	1000	1		
	SAGR R/E	84468-8689	028T		500	1		
	R/E	8690	↓		↓	↓		
	R/E	8693						2000
		Blank						

CT&E Environmental Services, Inc. - Anatech Division

RUN LOG
SEMI-VOLATILE GC/MS
HP 5970 Inst: E

Batch: E01OCT 98A Date: 10-1-98 Internal Std: S2,16,6 Analyst: TM

Report	Client/Project	Sample No.	Ext Batch	Dilution	Initial Vol/Wt	Final Vol	Notes	Inj.
	DFTPP		S2,16,1					0827
	Cal Ck		S2,17,1					
		LCB093W			1000	1		
		LCS093W			↓	↓		
		LCSD093W			↓	↓		
	BRSL	84441 - 8611	056Sa		30g	1		
	NMHR	84492 - 8739	093W		1000	1		
		8740	↓		↓	↓		
		8741						
		8742						
		8743						
		MS 8744						
		MSD 8745						
		8746	↓		↓	↓		1932

CT&E Environmental Services, Inc. - Anatech Division

8270 - 092

SEMI-VOLATILE EXTRACTION LOG

Log Out	Client	Reference #	Sample #	Extraction Date	Glass Set #	Sample Descriptio Initial	Sample Descriptio Extract	Sample Size	Dil	Final Volume	Cleanup Procedures	Spike Amount/#	Surrogate Amount/#	Initials
9-28	Lab Control Blank	Blank		9/28		DI	clear	1000		1ml			EI-1193 EI-1194 1000 BNA	[illegible]
	Lab Control Spike	Spike					yellow					EI-1214 1ml		[illegible]
	Lab Control Spike Dup	Dup					yellow							[illegible]
	Matrix Spike													
	Matrix Spike Dup													
9-28	1	84464	8677	9/28		clear	clear	1000		1ml			EI-1194 EI-1193 1000 BNA	[illegible]
	2		8678											[illegible]
	3		8680											[illegible]
	4		8681											[illegible]
	5		8682											[illegible]
	6	84467	8687	9/28				1000		1ml			1000 BNA	[illegible]
	7													
	8													
	9													
	10													
	11													
	12													
	13													
	14													
	15													
	16													
	17													
	18													
	19													
	20													

CT&E Environmental Services, Inc. - Anatech Division

8270 - 093

SEMI-VOLATILE EXTRACTION LOG

Log Out	Client	Reference #	Sample #	Extraction Date	Glass Set #	Sample Descriptio Initial	Extract	Sample Size	Dil	Final Volume	Cleanup Procedures	Spike Amount/#	Surrogate Amount/#	Initials
9-27	Lab Control Blank	Blank		9/29		DI		1000		1ml			E1.1193 E1.1184 100 µg/ml	LB MM
	Lab Control Spike	Spike										E1.121.4		LB
	Lab Control Spike Dup	Dup												LB
	Matrix Spike	84492	8744			Clear						E1.121.4		LB
	Matrix Spike Dup	84492	8745									E1.121.5		LB
	1	84473	8700											LB
	2	84492	8739											LB
	3		8740											LB
	4		8741											LB
	5		8742											LB
	6		8743											LB
	7		8746											LB
	8													
	9													
	10													
	11													
	12													
	13													
	14													
	15													
	16													
	17													
	18													
	19													
	20													